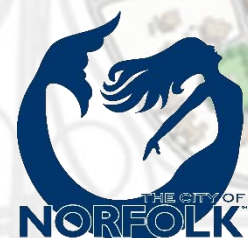


Military Circle / Military Highway Urban Development Area A Vision for the Future

Adopted by Norfolk City Council January 24, 2017

Ordinance No. 46,707



A note about the representation of light rail in this plan document.

- *The term “light rail” is used to represent not just the current Tide light rail transit, but also intended to be inclusive of any form of high capacity, fixed-guideway transit.*
- *The maps depicting potential future light rail alignments illustrate a 50-year vision for a regional high capacity transit system and are not intended to convey political commitments.*

This plan is based on work led by Renaissance Planning and Michael Baker International and funded by the Virginia Office of Intermodal Planning and Investment (OIPI) Urban Development Area Technical Assistance grant program. OIPI funds grants for localities throughout the state to plan for Urban Development Areas (UDA) in order to better coordinate future land use planning and transportation planning for targeted growth areas in Virginia. This year-long study is summarized in the Final Report: Military Circle / Military Highway Urban Development Area Vision for the Future, August 22, 2016.

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EXECUTIVE SUMMARY

Several challenges and opportunities converged in early 2015 that placed a spotlight on Military Circle Mall and the surrounding area.

- The City of Norfolk was in the early stages of developing *Vision 2100*, a land use approach to address resilience in the face of sea level rise. One of *Vision 2100*'s key implementation items recommends concentrating investments on higher ground and the study area is on the spine of high ground in Norfolk.
- Hampton Roads Transit completed the *Naval Station Norfolk Transit Extension Study* which suggested an extension of light rail or other high capacity transit to the Naval Station via two potential routes, including an alignment that would go through the Military Circle and JANAF mall areas and generally follow the Military Highway corridor northward to Little Creek Road.
- Military Circle Mall went into foreclosure and lost all of its anchor tenants, highlighting the decline in the retail market in this area and the need to develop a re-use plan.
- The Virginia Office of Intermodal Planning and Investment (OIPI) offered funding for localities in Virginia to plan for Urban Development Areas (UDA) in order to better coordinate future land use planning and transportation planning for targeted growth areas.

All of these individual events pointed to an opportunity to envision a new future for the Military Highway / Military Circle area, tying redevelopment and revitalization potential to both resilience goals and current and future transportation options. And a funding source to develop this vision was available from OIPI. The spine of high ground that the area sits on, coupled with its untapped economic potential and long history as a regional crossroads make it a prime location for the potential expansion of the current light rail system and new transit-oriented development (TOD) in a City that is very vulnerable to the effects of sea level rise. Even if light rail does not come to the area, or come anytime soon, planning for TOD is a good way to help ensure that the City is planning for a future that is not only sustainable, but prosperous, and provides for a high quality of life.

Working with the community, key stakeholders, elected representatives and staff, a 50-year transformation plan was drafted to show the potential development for the entire area over the long term by creating a series of walkable urban neighborhoods anchored by the new transit boulevard and station areas.

The purpose of this Vision Plan is not to suggest detailed or specific development proposals for any one site or property in this area but to inspire residents, property owners, developers, and City leaders with an aspirational vision of what this whole area might someday become with the right combination of public and private investment over time. While it's important to remember that such a plan relies on private investment following the public investment in infrastructure, it does not dictate specific changes to property or infrastructure. As stressed throughout this Vision Plan, the drawings and illustrations are aspirational and should not be interpreted as designed or engineered plans. Implementation of this Vision Plan necessitates further studies to better guide development decisions. This Vision Plan is a representation of what the future of Military Circle and Military Highway could look like in coming decades and will serve as a reference and guide for both public and private investments in the future.



Figure i. Vision Plan

TYPES OF LAND USES

A Curbside Light Rail
with Urban Streetscape



B Transit Oriented Mixed Use /
Office & Institutional Focus



C Transit Oriented Mixed Use /
Residential Focus



D Corridor Mixed Use /
Retail & Residential Focus



E High Density Residential & Mid Density
Live/Work Focus



TYPES OF AMENITIES

Institutional & Civic Buildings



Pocket Parks



Urban Plazas



Walkable Streets



Protected Bike Lanes



CONTEXT

Study Area Boundaries

The Military Circle / Military Highway Urban Development Area initially defined for the study focused on two areas: the existing Military Highway light rail station at Curlew Drive and Military Circle Mall and surrounding area. However, during the early phases of the analysis, the study area boundaries grew to also include the area around Sentara Leigh Hospital and the JANAF shopping center to capitalize on the larger development opportunities and synergies available in these adjacent districts. The final study area is shown below.

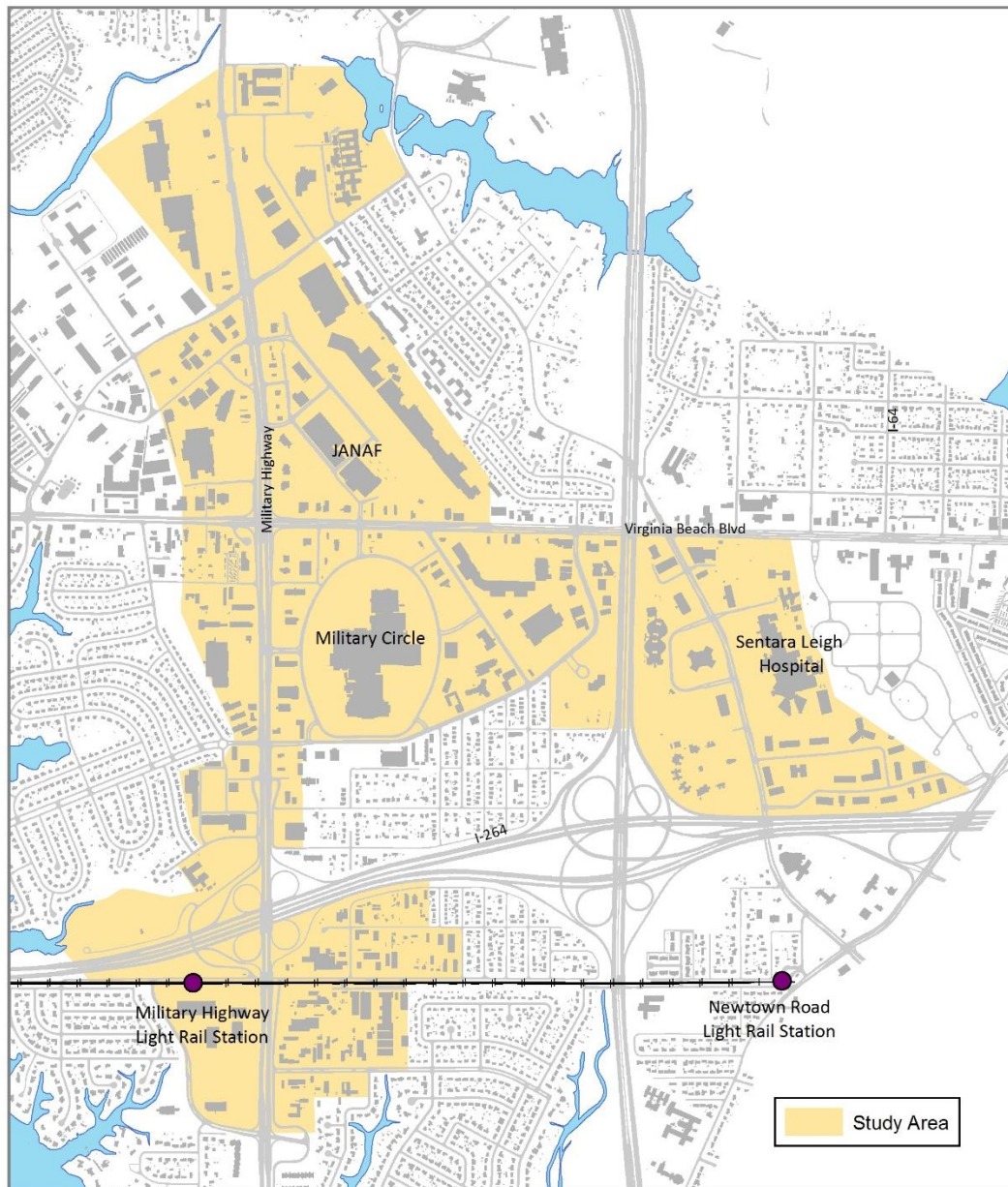


Figure 1. Study area boundaries

Why Study this Area?

Several challenges and opportunities converged in early 2015 that placed a spotlight on Military Circle Mall and the surrounding area.

- The City of Norfolk was in the early stages of developing *Vision 2100*, a land use approach to address resilience in the face of sea level rise. One of *Vision 2100*'s key implementation items recommends concentrating investments on higher ground and the study area is on the spine of high ground in Norfolk.
- Hampton Roads Transit (HRT) completed the *Naval Station Norfolk Transit Extension Study* which suggested an extension of light rail or other high capacity transit to the Naval Station via two potential routes, including an alignment that would go through the Military Circle and JANAF mall areas and generally follow the Military Highway corridor northward to Little Creek Road.
- Military Circle Mall went into foreclosure and lost all of its anchor tenants, highlighting the decline in the retail market in this area and the need to develop a re-use plan.
- The Virginia Office of Intermodal Planning and Investment (OIPI) offered funding for localities in Virginia to plan for Urban Development Areas (UDA) in order to better coordinate future land use planning and transportation planning for targeted growth areas.



Figure 2. Military Circle Mall

All of these individual events pointed to an opportunity to envision a new future for this area, tying redevelopment and revitalization potential to both resilience goals and current and future transportation options. In addition, a funding source to develop this vision was available from OIPI. The spine of high ground that the area sits on, coupled with its untapped economic potential and long history as a regional crossroads make it a prime location for the potential expansion of the current light rail system and new transit-oriented development (TOD) in a City that is very vulnerable to the effects of sea level rise. Even if light rail does not come to the area, or come anytime soon, planning for TOD is a good way to help ensure that the City is planning for a future that is not only sustainable, but prosperous, and provides for a high quality of life.

What is transit-oriented development?

Transit-oriented development (TOD) is development that includes a mixture of housing, office, retail and other amenities integrated into a walkable neighborhood and located within close proximity to transit. TOD creates better access to jobs and housing for people of all ages and incomes. Some of the potential benefits of TOD include creating walkable communities that accommodate healthy and active lifestyles, increasing transit ridership and fare revenue, increasing property values, improving access to jobs and economic opportunities, and expanding mobility choices that reduce dependence on the automobile, reduce transportation costs and free up household income for other purposes.

Existing Conditions

The study area is home to Military Circle Mall, a 1970's era enclosed mall, JANAF shopping center, a 1960's era open air shopping center that has been reinvented with big box style retail, and Sentara Leigh Hospital. Both shopping areas are lagging, with Military Circle currently in receivership and JANAF on the market.

Prior to the introduction of the Interstate Highway System, the study area was generally rural, bordered by the same single-family residential communities—Glenrock and Poplar Halls—that are still there today. Since the introduction of I-264 and I-64 in the 1960's and 70's, rapid development followed.

The study area is comprised of approximately 550 acres (excluding streets and water), almost all of which is commercial (69%). The existing land uses in the study area are broken down as follows:

Table 1. Current land uses in study area

Current Land Use	Acres	Percent of Total
Low Density Residential	8	1.4%
Medium Density Residential	0	0.0%
High Density Residential	4	0.7%
Industrial	49	8.8%
Commercial	385	69.2%
Institutional	82	14.8%
Open Space/Recreation	8	1.5%
Transportation /Utility	5	1.0%
Vacant	15	2.7%
Total	556	100.0%

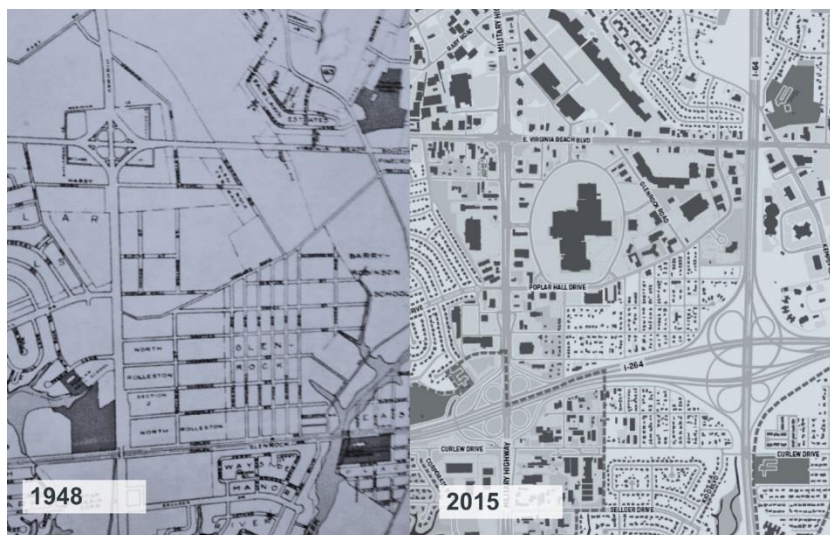


Figure 3. Study area yesterday and today

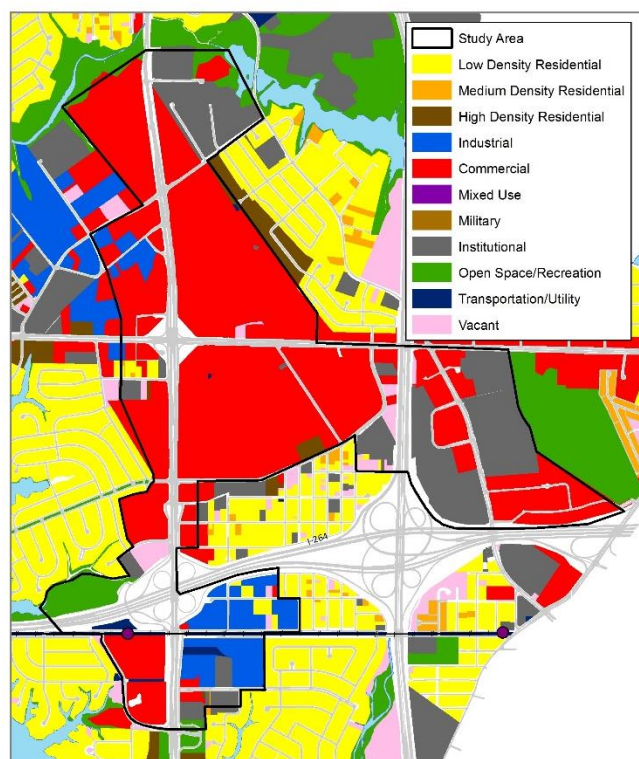


Figure 4. Current land uses in study area

While the study area is mainly commercial, it is surrounded by numerous suburban style neighborhoods as shown on Figure 5. The majority of the housing in these areas is single-family detached.

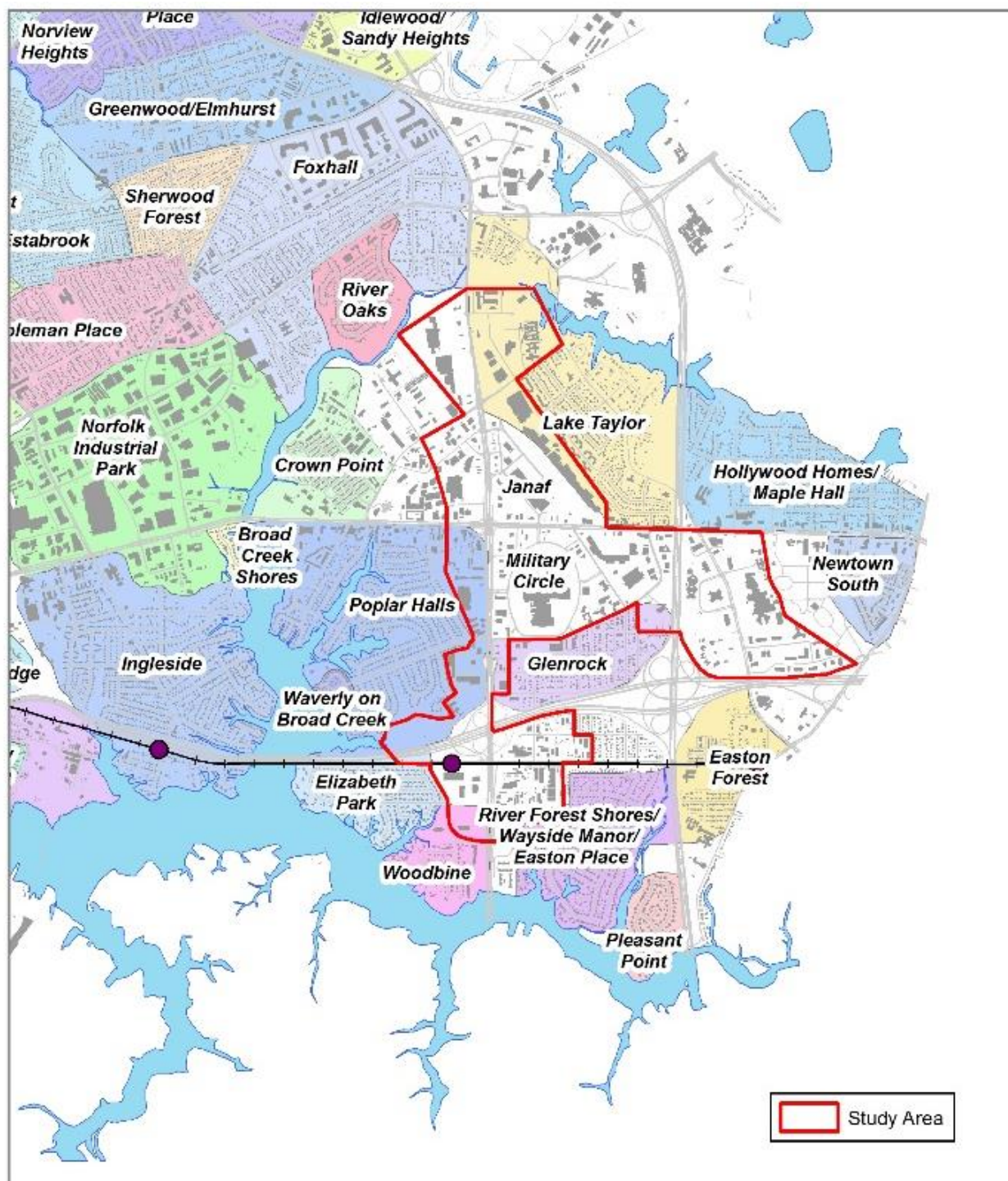


Figure 5. Civic leagues surrounding study area

Study Area as Regional Crossroads

In many ways, the study area has been a regional crossroads for decades. The intersection of two major boulevards—Military Highway and Virginia Beach Boulevard—created a transportation and economic crossroads in the mid-20th century that led to the growth of much of the early retail development in the region, such as the JANAF shopping center. With the advent of interstate linkages from I-64 and I-264 in the 1960s and 70s, the area was further strengthened as a regional crossroads, with some of the best regional accessibility in Hampton Roads, including high speed connections to Virginia Beach, Chesapeake and the Peninsula. In addition, the introduction of the Tide light rail in the study area, with a direct link to Downtown, enhanced the site's accessibility.

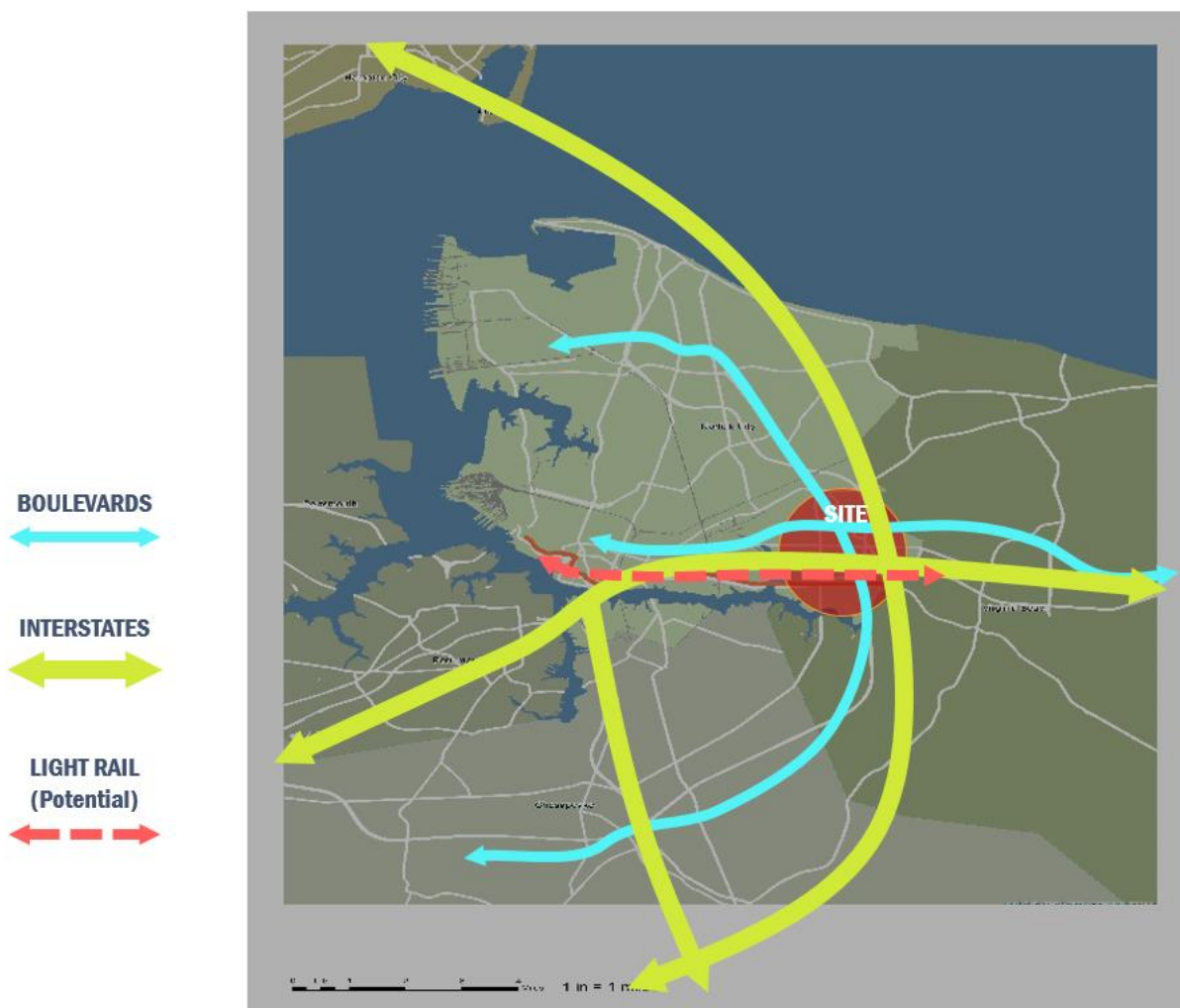


Figure 6. Regional transportation context

Long Term Resilience

Norfolk's long term resilience in the wake of increasing recurrent coastal flooding has been a major policy direction of the City in recent years, leading to the emerging *Vision 2100* policy initiative for long term resilience adaptations to the changing flood levels anticipated in the coming century. The City's long term resilience depends on smart growth practices that protect both public infrastructure investments and future private development by concentrating new development in areas relatively better protected from recurrent coastal flooding. With a long term vision for potential private and public investment such as what is being considered for the study

area, it is particularly important to recognize the fortunate location of this area on the spine of relatively high ground in Norfolk.

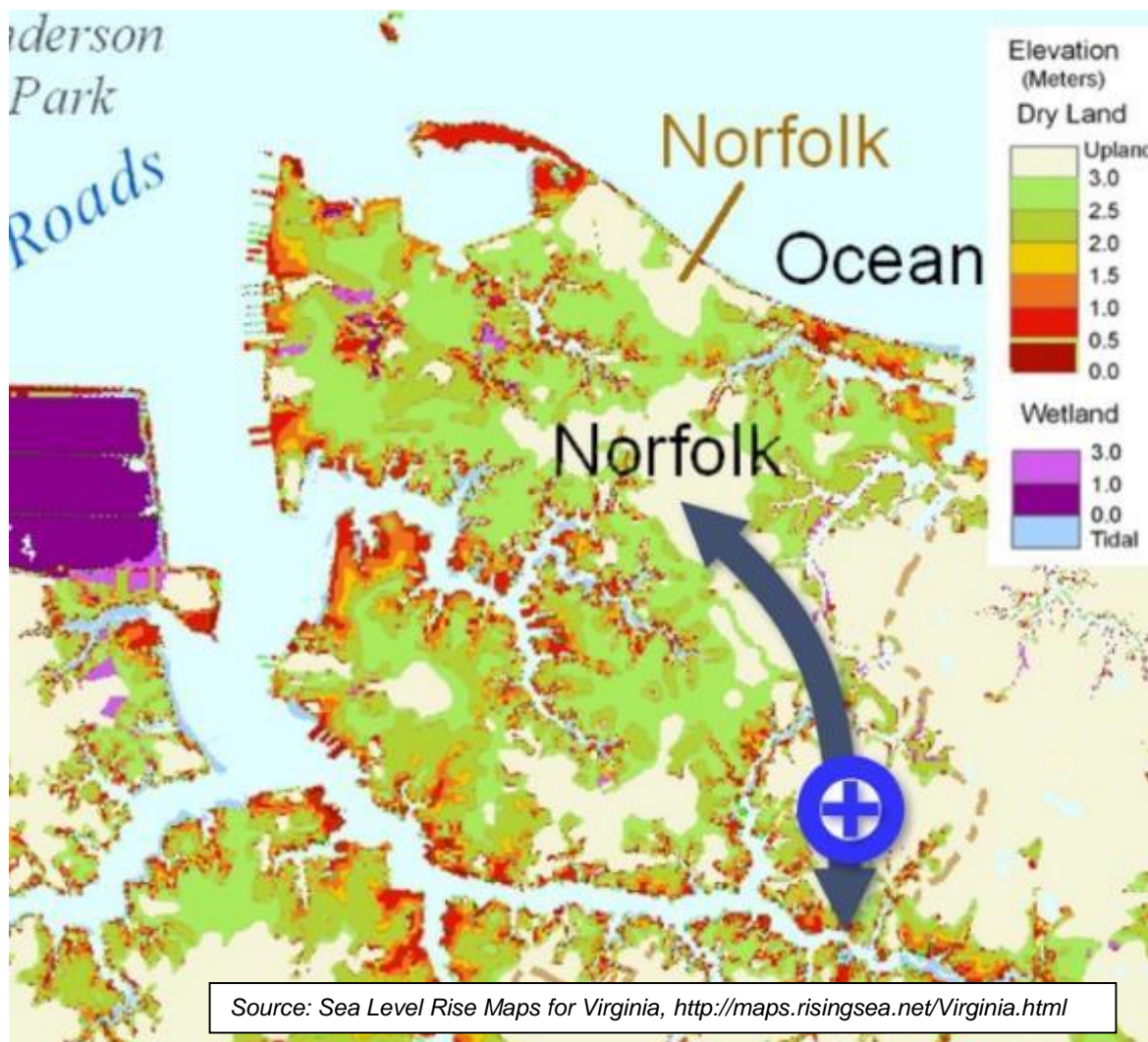


Figure 7. Long term resilience as illustrated by elevations

The blue cross on this map indicates the project site, which is located on a spine of high ground in Norfolk, illustrated by the blue arrow. Lighter areas on the map are higher ground that is projected to be safer from recurrent flooding.

Existing Plans & Policies

Planning for Military Circle and Military Highway is not new—there have been a number of planning efforts for the area in the past several years. The *Comprehensive Plan for the Military Highway Corridor District* (2006) established a plan for the entire Military Highway Corridor that focused primarily on roadway operational improvements and beautification proposals within the right-of-way. This plan was adopted as an appendix to *plaNorfolk2030* and is referenced in land use decisions, especially as it relates to landscaping and corridor frontage.

In 2012, the City obtained assistance from the Urban Land Institute to convene a Technical Assistance Panel (TAP) to study the area around Military Circle Mall in greater detail. This resulted in a TAP report titled *The Future of the Military Highway Corridor*, broadly outlining a revitalization strategy focused on retaining the area's retail focus by creating a "lifestyle center" and adding multifamily housing. However, this retail-oriented vision now seems unlikely given the current challenges of retail at this location and the lack of market potential for new retail (market assessment in following section). However, other ULI panel recommendations can enhance the area's redevelopment potential:

- Slow vehicular traffic and improve pedestrian accessibility
- Improve vehicular accessibility and retail visibility
- Develop an architectural standard for the area
- Evaluate increased zoning density and shared parking
- Relocate above ground utilities
- Include open-air green space within development
- Work with Costco to find a suitable relocation site

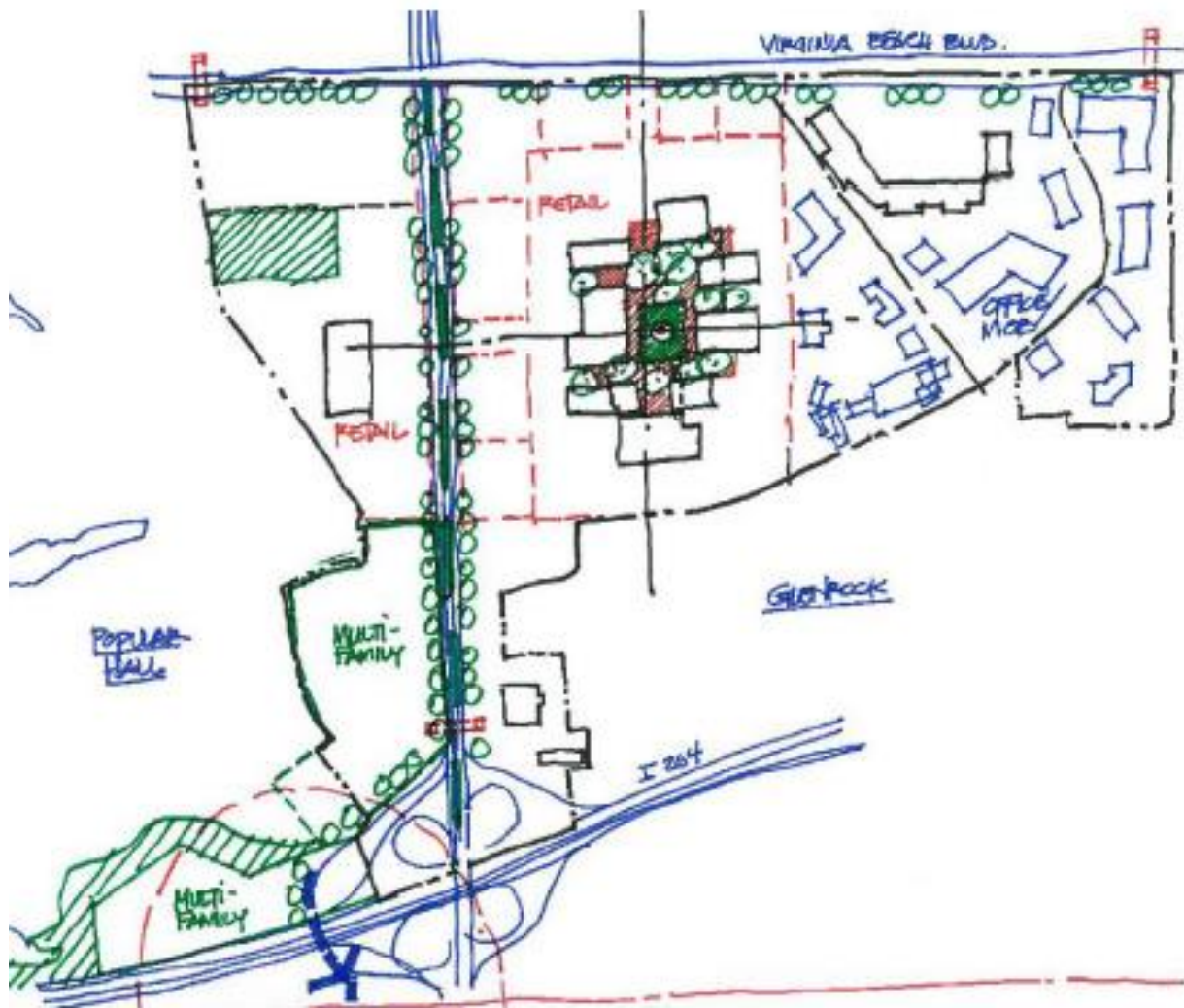


Figure 8: ULI Panel diagram

Finally, as mentioned above, *plaNorfolk2030*, the General Plan of the City of Norfolk, adopted by City Council on March 26, 2013, established the overall policy direction for the revitalization of this area, as well as confirming the designation of portions of the study area as an urban development area.

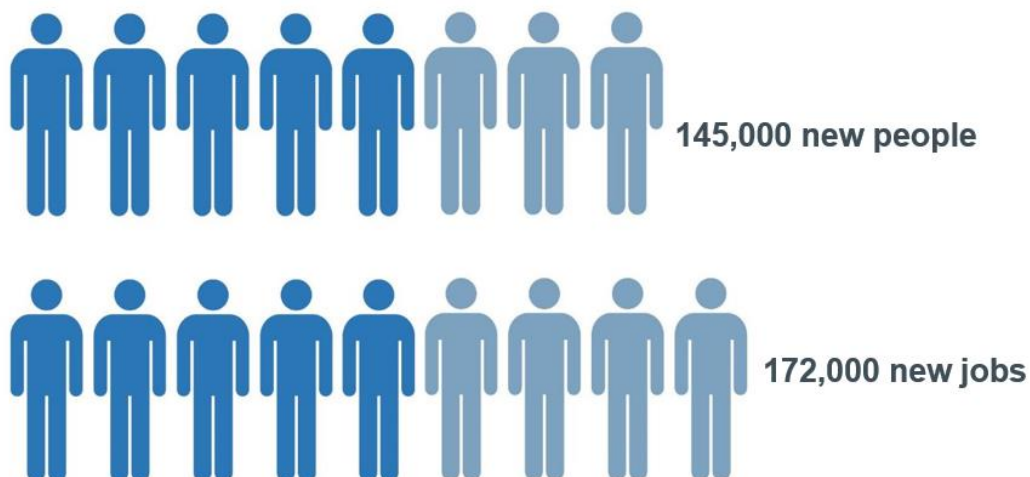
Market Assessment

As part of the analysis of this area, a general market assessment was conducted that is described in full in the Appendices section of the *Final Report: Military Circle / Military Highway Urban Development Area Vision for the Future*, August 22, 2016. A summary of the findings are presented below by research category.

Demographic Profile and Trends

The market study highlights several themes regarding demographics, but the following key trends emerge:

- The UDA is regionally prominent, with high accessibility to the regional workforce and employment base. It is a large site with interstate highway access and a history as a regional destination.
- Projected long term population growth is moderate, but higher than the previous 20 years.
- Long term employment growth will be faster than population growth but slower than employment growth of the previous 20 years.
- The primary market area is diverse, with multiple consumer markets to target.
- The trade area is becoming more affluent:
 - Strong growth in families (35-54) with incomes above \$75,000 and empty nesters (55-74) with incomes above \$50,000.
 - Higher income millennials (under 35) and families (35-54) are basically replacing lower income families.
 - Net increase in retirees (75+) across most income groups.
- This demographic shift to more millennials and boomers should support a more mixed used/mixed income community.



Source: Woods & Poole Economics

Figure 9. Regional 20-year projections

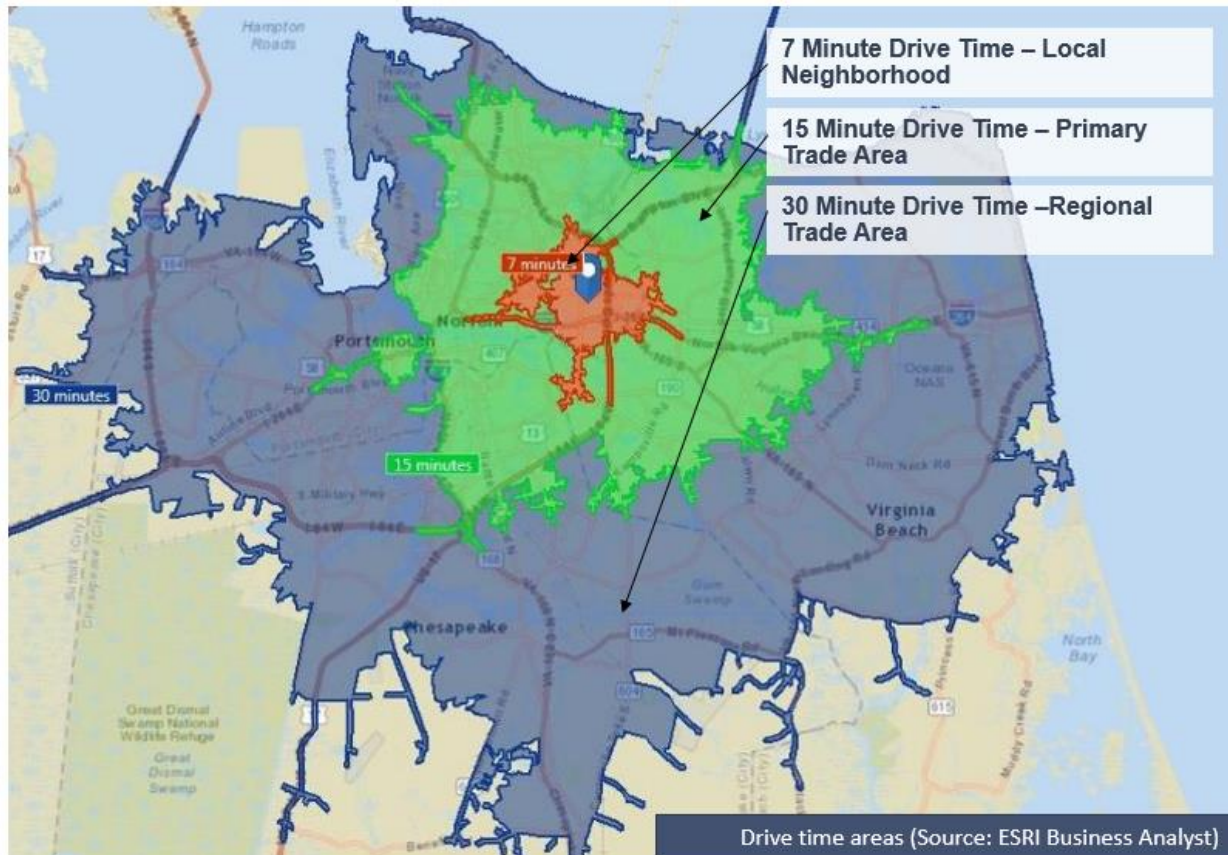


Figure 10. Drive time areas

Market Analysis

Retail

The study area is part of a major retail submarket, but it is underperforming because of Military Circle Mall's troubles, as well as other weaker retail (or formerly retail) establishments. In fact, while the overall regional retail market is healthy and expanding, major blocks of vacant space exist in the region whose best use may no longer be retail. Long term sales trends support continued retail development, but only in the strongest locations.

The primary market area is well-served by major shopping centers, with 16 centers containing 935 stores and 8.1 million square feet of retail space. The smallest center has 192,000 square feet, and there are four centers, in addition to Military Circle Mall, that have over 800,000 square feet of space. In general, there are limited opportunities for new retail development in the study area based on the retail market analysis.

Office

The Military Highway area is not a major office submarket today. Downtown Norfolk, Greenbrier, and Pembroke dominate, especially in terms of Class A space. The regional market is stable with a 15.7% vacancy rate, but is still recovering from the recession. There is minimal new construction occurring and very little in the pipeline. In general, tenants are looking for value, including lower operating and parking costs. However, the biggest impact on the office market is the fact that office tenants have reduced space needs thanks to technology and changing work practices, such as shared space, resulting in reduced office space demand. Based on the market

study, the study area is an unlikely location for a new Class A office cluster, even if one could emerge in the current market. However, there could be potential for medical office space for the study area given its proximity to Sentara Leigh Hospital and regional accessibility.

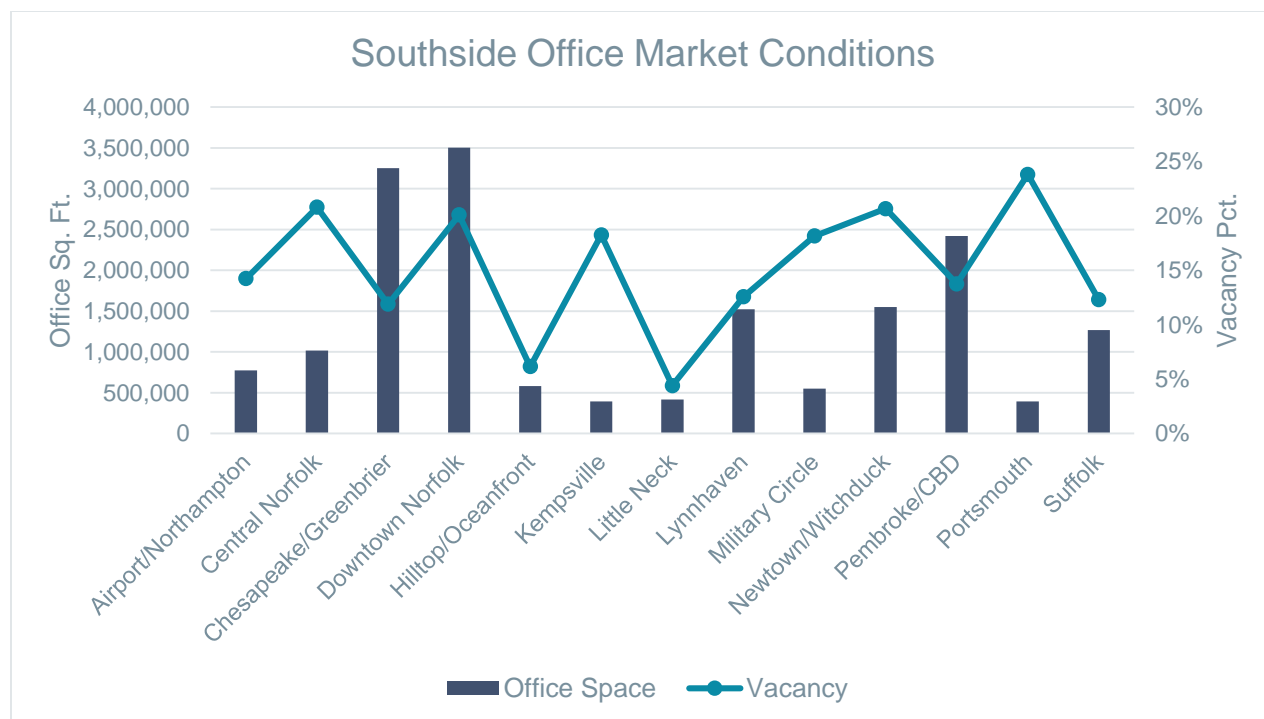


Figure 11: Southside office market conditions

Residential

New residential construction in the region has nearly recovered from the recession lows, led by the multifamily housing market. The regional single-family market is still somewhat fragile, but the multifamily market is stable and healthy, with Norfolk leading the region in apartment development. According to Norfolk building permit data, single-family permits are on a steady upward trend and multifamily permits are showing recent strength, led by downtown revitalization. One thing to note is that the region (including Norfolk) shows minimal condominium development or demand.

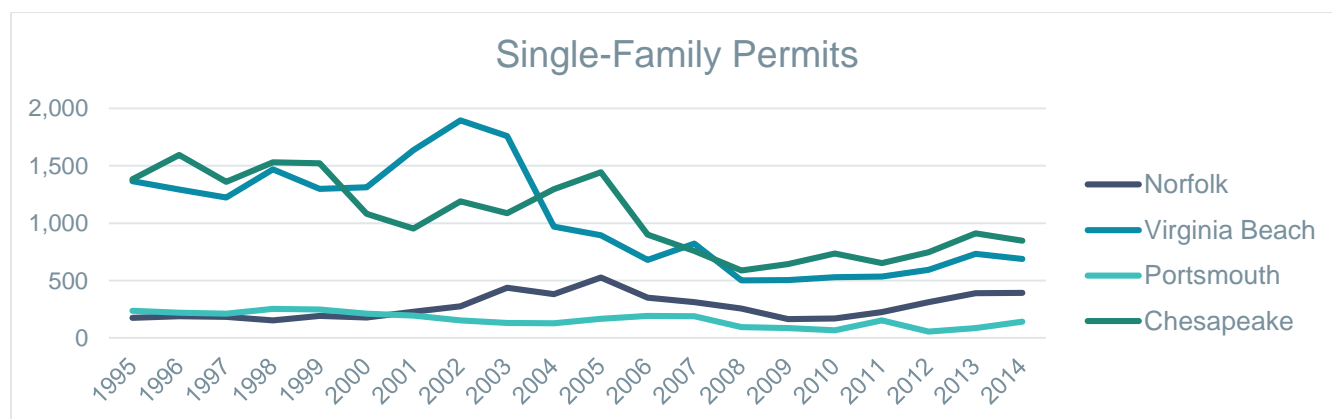


Figure 12: Single-family permits

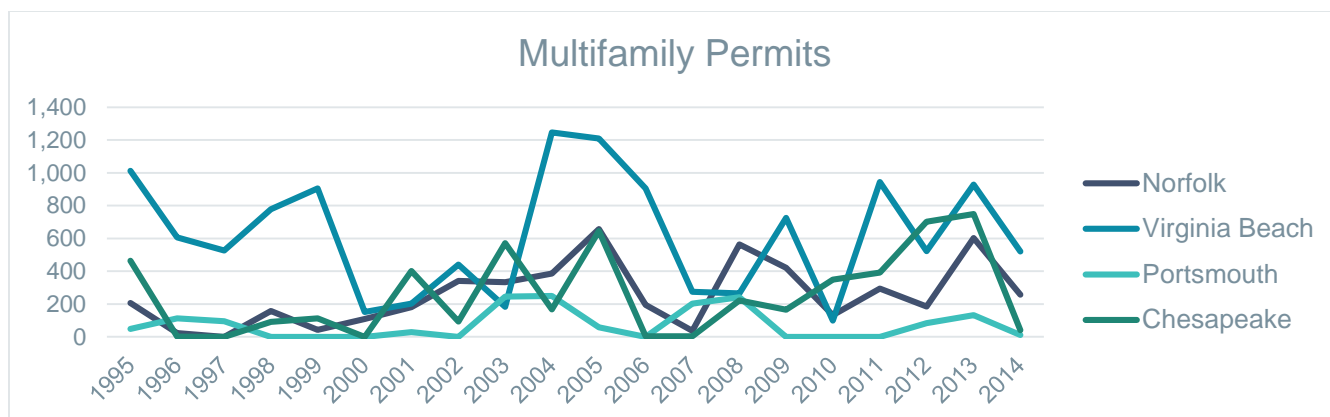


Figure 13: Multifamily permits

In projecting demand for housing in Norfolk, one of the biggest factors will be the millennials, who comprise the largest age group in Norfolk. This demographic is forecasted to remain the largest, even as the millennial generation ages. Millennials (and young people in general) tend to prefer denser, walkable, mixed use places to live.

In a recent Urban Land Institute survey of millennials, only 13% actually lived in or near downtown, while 35% lived in other City neighborhoods and 13% lived in dense, older suburbs. Not all (or even most) millennials are looking for downtown, “high-rise” living, but they do tend to value walkability and mixed use neighborhoods.

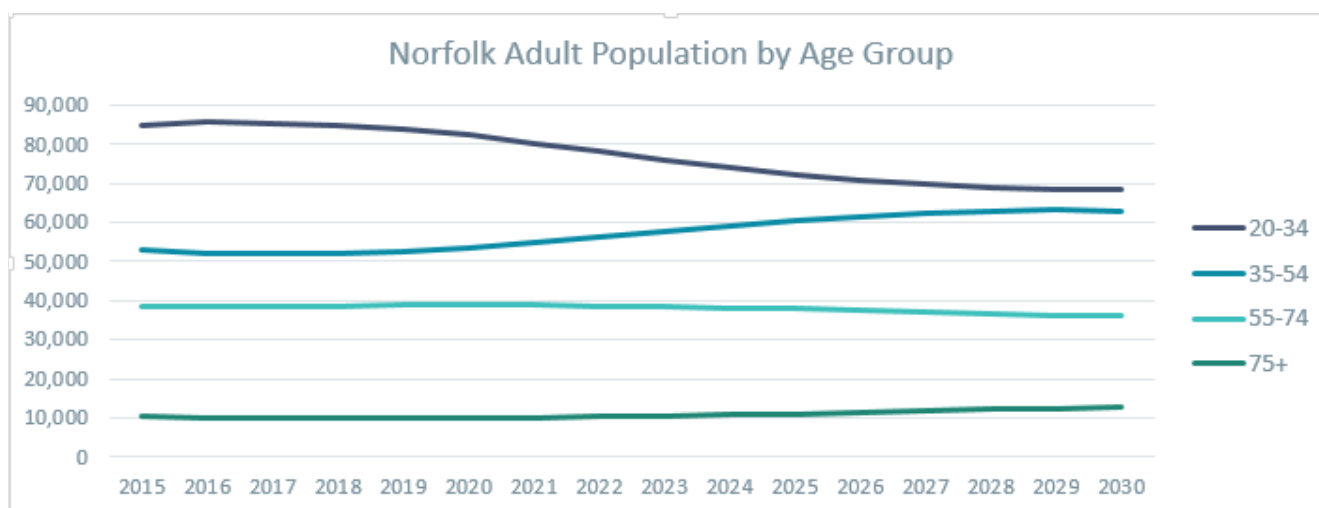


Figure 14: Adult population by age group in Norfolk

Overall demand for new housing in Norfolk is projected at nearly 500 units annually and the study area can potentially capture 140 of those units per year. The following table shows annual projected demand for housing by type.

Table 2: Annual demand projections by housing type (Source: Renaissance Planning)

Product Type	Norfolk Total	UDA Capture	Capture Percentage
Single-Family Detached	200	50	25%
Single-Family Attached	45	15	33%
Condominium	20	0	0%
Rental Apartment	230	76	33%
TOTAL ANNUAL DEMAND	495	141	28%

Housing projections are based on:

- Growth in households that are income-qualified for buying new homes and/or renting new apartments.
- Annual turnover of owner and renter households and their propensity to buy or rent the homes they occupy.
- Product type preferences of moving households (detached, attached, or multifamily).
- Propensity for choosing new construction units.
- An assumption that some units will be purchased by investors.

Once the total Norfolk demand was estimated, capture rates were applied to project demand in the study area by product type. Note that single-family demand can cross over between product types depending on product availability and the attractiveness of the location (for example, buying a large attached unit instead of a detached home).

Redevelopment Potential

Based on the market assessment, the potential demand for redevelopment is as follows:

Retail

- The local market is highly competitive, but the study area is under performing.
- New development in the pipeline will make the study area increasingly less attractive for most shoppers.
- The retail industry in general is exiting marginal and less competitive locations.
- The study area's long term future as a major regional retail center seems unlikely.

Office

- Most office space, especially Class A, is concentrated in the two central business districts and the Greenbrier area plus a few other suburban locations.
- Downtown Norfolk is valued but not currently growing.
- The study area is not on the radar as a significant Class A office location.
- Hospital proximity and employment growth could make medical office space an opportunity for the study area.

Residential

- Norfolk is a fairly strong urban/inner ring residential market right now.
- Growth has been solid for both for-sale single-family and rental apartments.

- Norfolk has and will retain a substantial young-adult population, which suggests that the “urban” market will continue to grow.

Table 3: Estimated annual demand capture by product type

Product Type	Estimated Annual Demand Capture
Retail	Only small increments of space supporting other development types
Office	15,000-20,000 square feet of general office 15,000-20,000 square feet of medical office
Residential	50 single-family detached units 15 single-family attached units 76 rental apartments

Tomorrow's Transit Crossroads?

The City of Norfolk, together with the regional transit agency, Hampton Roads Transit (HRT), completed the *Naval Station Norfolk Transit Extension Study* in 2015. This major study explored the potential for light rail extension to the Naval Station Norfolk, the region's largest employer, via two potential routes; one to the west going from Downtown northward to the Naval Station, and one to the east going through the Military Circle and JANAF mall areas and generally following the Military Highway corridor northward.

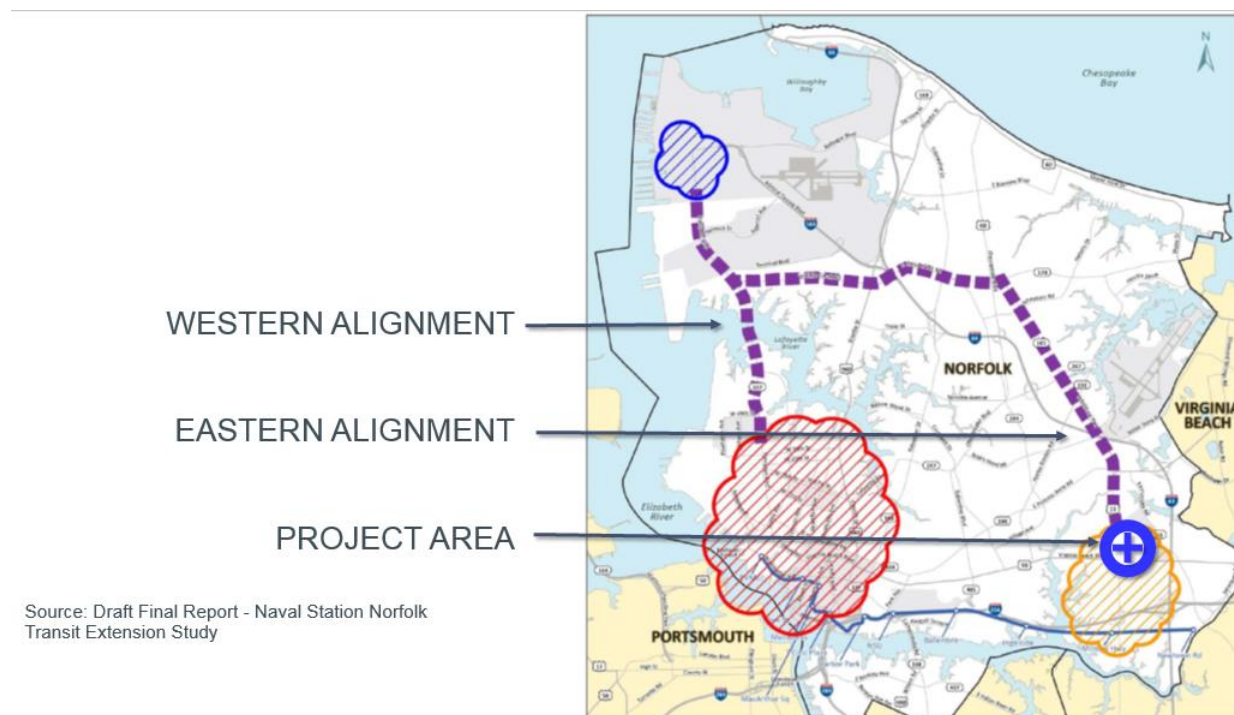


Figure 15. Potential alignment options for light rail extension to Naval Station Norfolk

With the possibility of a future eastern alignment of light rail extending from the existing Tide line to the naval base, paired with the potential to extend light rail to the east from the Newtown Road station and to the south into Chesapeake, the study area could one day become the transit

transportation crossroads and a catalyst for future multimodal development for many decades to come.

Light rail presents the opportunity to transform this area through transit-oriented and transit-adjacent development around potential station areas. This mixed use land use pattern of compact and pedestrian- and bicycle-friendly development offers significant opportunities for economic development and increased land values. But even if light rail does not come to this area, or is delayed, transit-oriented development and associated design principles are fundamentally the right planning principles to bring a higher quality of life and greater economic prosperity to this area.



Figure 16: Planned transportation improvements

Several planned or potential transportation improvements in the vicinity of the study area will also improve transportation in the area, and are shown in Figure 16. The impending transformation of the Military Highway / Northampton Boulevard intersection just to the north of the study area (number 1 on Figure 16) will install a continuous flow intersection that will bring relief to a significant transportation bottleneck on Military Highway. In addition, planned improvements to the two major interchanges near this area, the I-64 / Military Highway interchange and the I-264 / I-64 interchange (numbers 2 and 3 on Figure 16) call for streamlining of the ramp systems to reduce congestion and safety and improve operations. In addition, the I-64 / Military Highway interchange could potentially remove one or more of the cloverleaf ramps at the interchange, thereby providing potentially more land for light rail overpasses at the interchange. Modifications and access changes to the I-64 / Northampton Boulevard interchange have also been programmed by the state (number 4 on Figure 16) to support new retail developments in this area.

Top Opportunity Based on Study Area Context

The existing light rail transit station at Military Highway and Curlew Drive is too far from the heart of the study area to have a major influence on its redevelopment. A potential new transit extension could connect the study area directly to Naval Station Norfolk as well as to Downtown Norfolk via the Tide LRT, providing a premium transit connection to the City's, if not the region's, two largest employment centers.

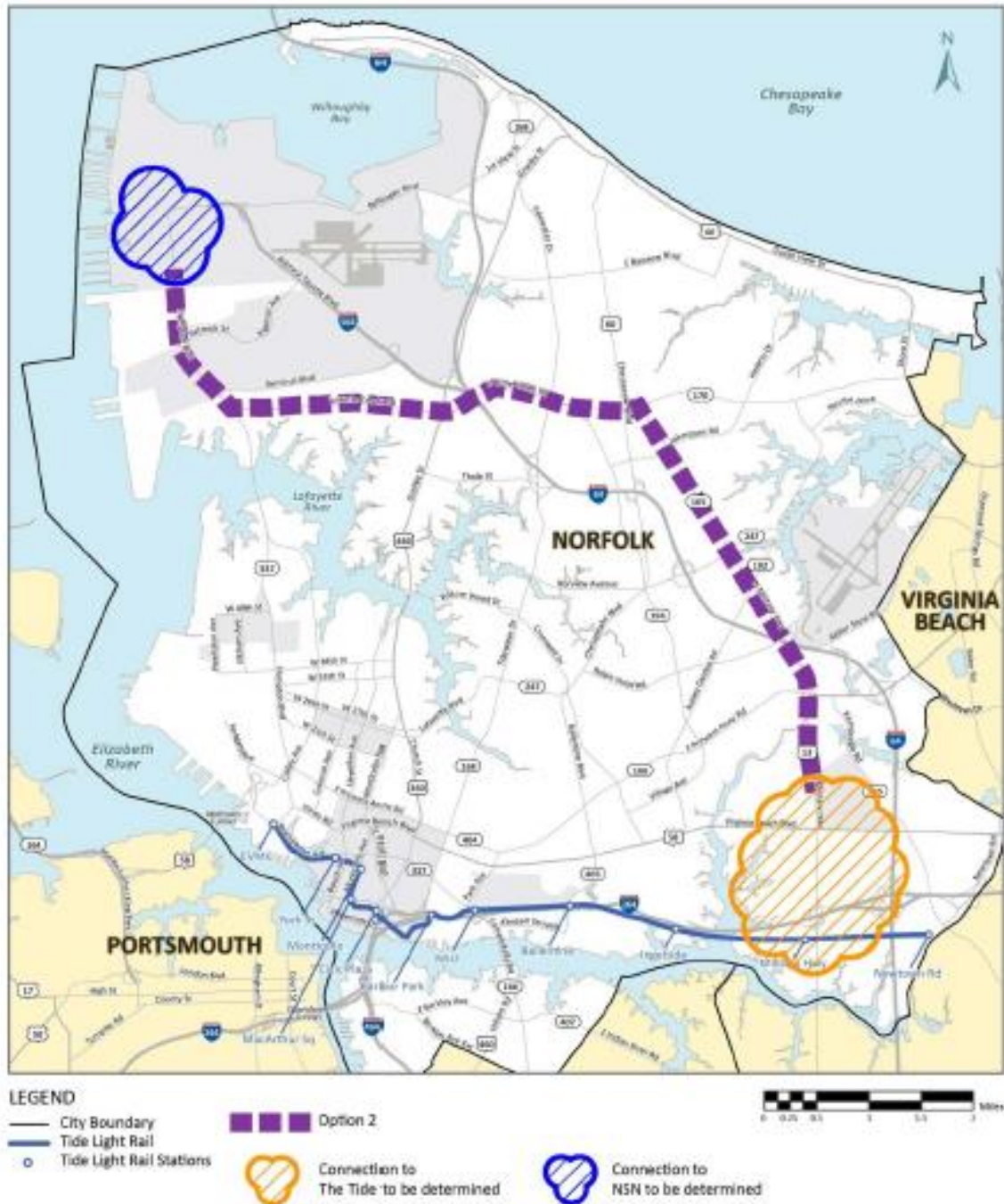


Figure 17. Option for an eastern alignment for light rail extension

Transit access and walkability are increasingly important and desirable features for homes, workplaces, and shopping areas, and given the built-up character of the City, the study area could be one of the only places where large-scale TOD is possible. New multimodal accessibility to these two activity centers could help spur the land use transformation of the study area from retail to mixed use.

A number of sources have documented preferences for walking and transit among millennials as well as Americans more generally. A 2014 Rockefeller Foundation survey found that 66% of millennials deem high-quality transportation one of the top three criteria they would weigh when deciding where to live. Fifty-four percent of millennials would consider moving to another City if it had more and better options for getting around, while 80% believe it is important to have a wide range of options. Baby boomers share some of these same preferences.

The possibility of extending light rail through this area, paired with the forecasted long term resilience relative to flooding and the demographic projections for an increase in millennials and boomers with their preference for walkable, mixed use communities all point to the key opportunity for the study area—TOD. A growing and aging population dominated by millennials and baby boomers has created a demand for 15-minute walkable centers with a mixture of uses that provide alternatives to the car.

A Note on TOD

TOD calls for development that is oriented to a transit facility, with mixed land uses in a compact form resulting in a pedestrian- and bicycle-friendly community. The principles of TOD include increased potential for economic development, increased travel choices and the creation of livable communities. If light rail is not extended through the study area, the principles of TOD still apply to the future development of the study area.

PROCESS

A Vision Built on Public Input

In a year-long planning process, the vision for the Military Circle / Military Highway Urban Development Area was built from the ground up with extensive outreach and citizen and stakeholder involvement. The four core avenues for involvement included an advisory committee composed of property owners, business owners and residents in the area, as well as a member from City Council and the City Planning Commission, key stakeholders in the broader community, civic leagues and City and HRT staff. In addition, the process included two well publicized citizen involvement meetings and work sessions and briefings with the City Planning Commission and City Council. The full list of meetings, interviews and outreach opportunities during the 12-month planning process is listed in Table 4 below:

Table 4. Public and stakeholder engagement activities during the planning process

Date	Engagement Activity
July 14-15, 2015	Consultant team interviews with civic leagues and development community
September 28-29, 2015	Consultant team interviews with City staff and stakeholders
September 28, 2015	Community meeting at Calvary Revival Church
September 29, 2015	Advisory Committee meeting
October 16, 2015	Norfolk Economic Development Authority presentation
December 7-8, 2015	Consultant team interviews with City staff and stakeholders
December 7, 2015	Advisory Committee meeting
December 10, 2015	Norfolk City Planning Commission presentation
February 29-March 1, 2016	Consultant team interviews with City staff and stakeholders
February 29, 2016	Community meeting at Calvary Revival Church
March 1, 2016	Advisory Committee meeting
March 16, 2016	Hampton Roads Chamber of Commerce presentation
May 12, 2016	Norfolk City Planning Commission presentation
June 14-15, 2016	Consultant team interviews with City staff and stakeholders
June 14, 2016	Norfolk City Council presentation
June 15, 2016	Advisory Committee meeting

Project Goals

In September of 2015, City staff and the consulting team conducted a visioning kickoff meeting with the general public which was attended by almost 150 people from the City of Norfolk and surrounding areas. Through interactive exercises during the public meeting, and through affirmation with the advisory committee, a series of clear project and process goals were developed for the study. Project and process goals are shown in Table 5.

Table 5: Process and project goals

PROCESS GOALS	PROJECT GOALS
BE TRANSPARENT	REVITALIZE SURROUNDING AREA
BE INCLUSIVE	CONNECT & UNIFY THE AREA
BE SUSTAINABLE	INCREASE SAFETY & SECURITY
DON'T SIT ON A SHELF	ATTRACT ECONOMIC DEVELOPMENT
	BUILD FOR RESILIENCE



Figure 18: September 28, 2015 public meeting



Figure 19: Word cloud of feedback received from September 28, 2015 public meeting

Alternatives and Preliminary Design Development

Project Goals and Potential Light Rail Alignments

Based on the input received from the public, advisory committee and City stakeholders, the project team analyzed the potential light rail alignments through the study area based on the HRT *Naval Station Norfolk Transit Extension Study* (NSN study) in the context of the identified project goals. The NSN study identified two potential alignments for light rail extensions that would go through the study area with the goal of a “one seat” ride from the east/west Tide route to the Naval Base. These included:

- Split off from the existing Tide alignment at or near the Military Highway station at Curlew Drive to follow Military Highway (A in Figure 20)
- Split off from the existing Tide alignment at or near the Newtown Road station to follow Kempsville Road (B in Figure 20)

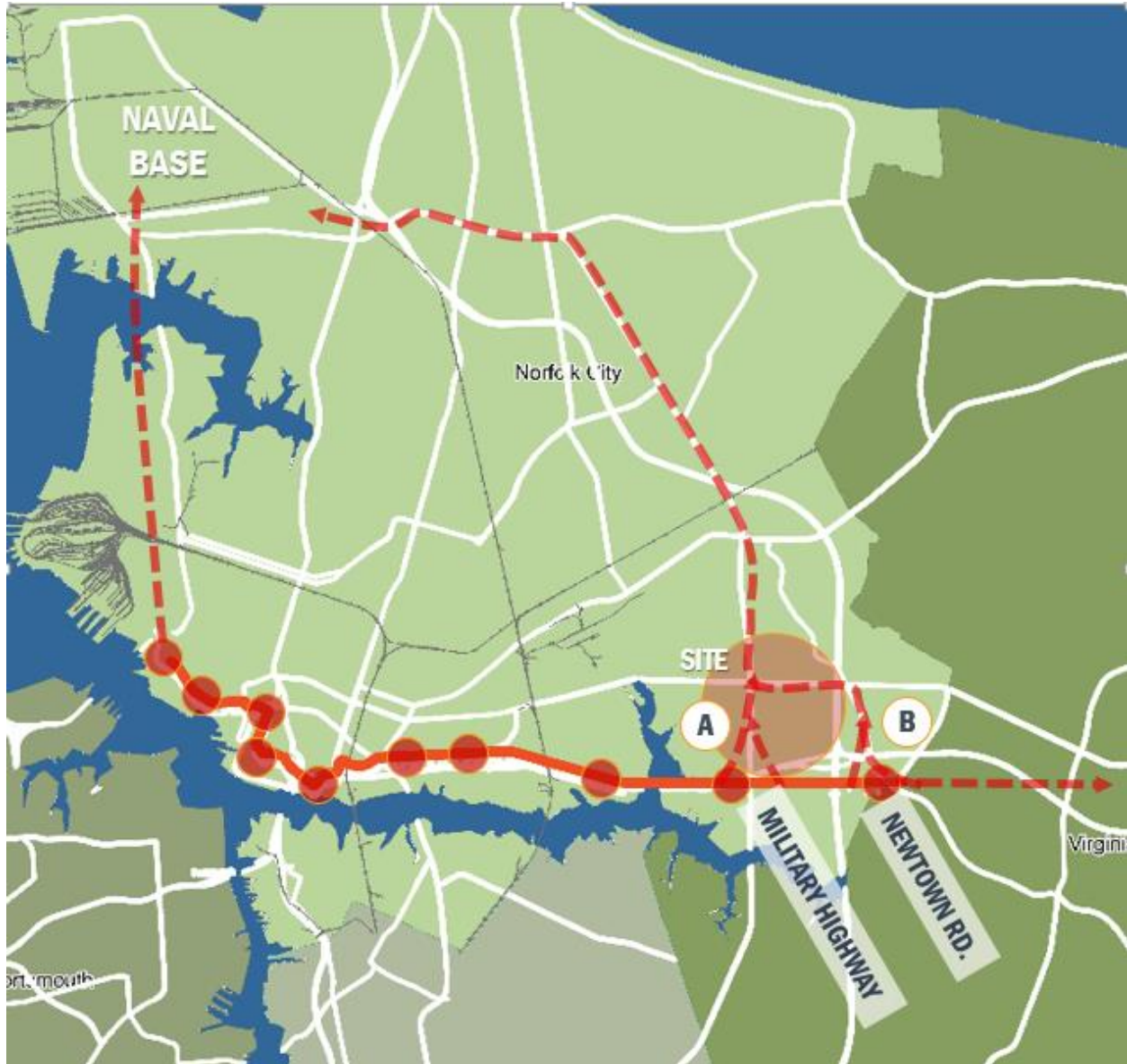


Figure 20. Two potential eastern alignments for light rail from the HRT NSN study (2015)

Initial Light Rail Alignment Alternatives

From these two alternatives in the NSN study, the project team developed a set of four initial alternative plans for potential light rail extensions that would best meet the project goals. The four alternative plans for potential light rail extension are summarized below and shown in Figure 21. Note that these are illustrative examples and not designed or engineered.

A.1. Pull off at Military Highway station and align directly along Military Highway

- Bridges over I-264 and Virginia Beach Boulevard
- Light rail alignment along Military Highway next to roadway
- Potential stations at Military Circle Mall and Lowery Road

A.2. Pull off at Military Highway station and create new parallel alignment to the east of Military Highway

- Bridges over I-264 and Virginia Beach Boulevard
- Light rail alignment east of Military Highway to create a new internal “transit boulevard”
- Potential stations at Military Circle Mall and Lake Taylor Hospital/JANAF

B.1. Pull off at Newtown Road station and align directly along Kempsville Road, then along Virginia Beach Boulevard and north through JANAF

- Widen existing underpasses at I-264 and I-64 to accommodate light rail
- Light rail alignment generally along Kempsville Road and Virginia Beach Boulevard
- Potential stations at Sentara Leigh Hospital and Lake Taylor Hospital/JANAF

B.2. Pull off at Newtown Road station and align directly along Kempsville Road, then head west through Military Circle Mall and north through JANAF

- Bridges over I-64 and Virginia Beach Boulevard
- Widen existing underpass at I-264
- Light rail alignment pulling off Kempsville Road to create new internal “transit boulevard”
- Potential stations at Sentara Leigh Hospital, Military Circle Mall and Lake Taylor Hospital/JANAF



Figure 21: Summary maps of initial 4 alternatives for potential light rail extension

Refined Light Rail and Land Use Alternatives

After a thorough review of the initial four light rail extension alternatives with the advisory committee and City Planning Commission, the project team narrowed the options down to two basic light rail alignment alternatives—A.2 and B.2. Both of the new refined alternatives were chosen for further analysis because they best matched the goals identified by the public and advisory committee, including:

- Catalyzing economic development through TOD opportunities
- Connecting and unifying the area
- Revitalizing Military Circle Mall and JANAF development cores

Both A.2 and B.2 showed a new “transit boulevard” alignment for the future light rail that is not aligned along the major 6-10 lane arterial highways (Military Highway and Virginia Beach

Boulevard) in favor of a new right-of-way that is pulled away from the arterials and that has greater flexibility to design a walkable environment around a narrower and lower speed street that can become the focus of new TOD communities.

Based on these two alternatives (A.2 and B.2), future land use concepts were developed for each alignment to maximize the potential for revitalization and new transit oriented development associated with the potential light rail extension and are displayed in Figures 22 and 23.

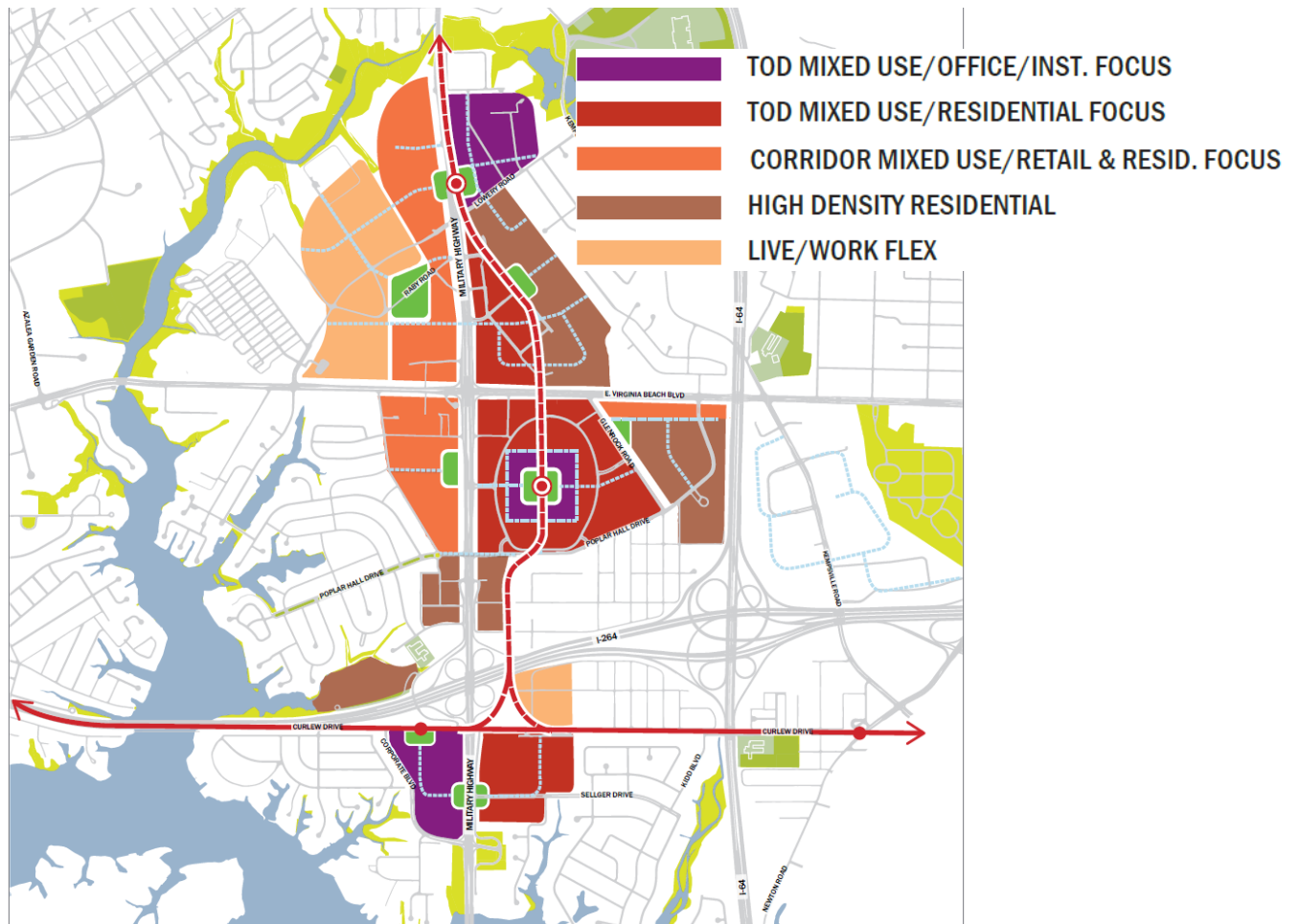


Figure 22: Alternative A.2 with associated future land uses

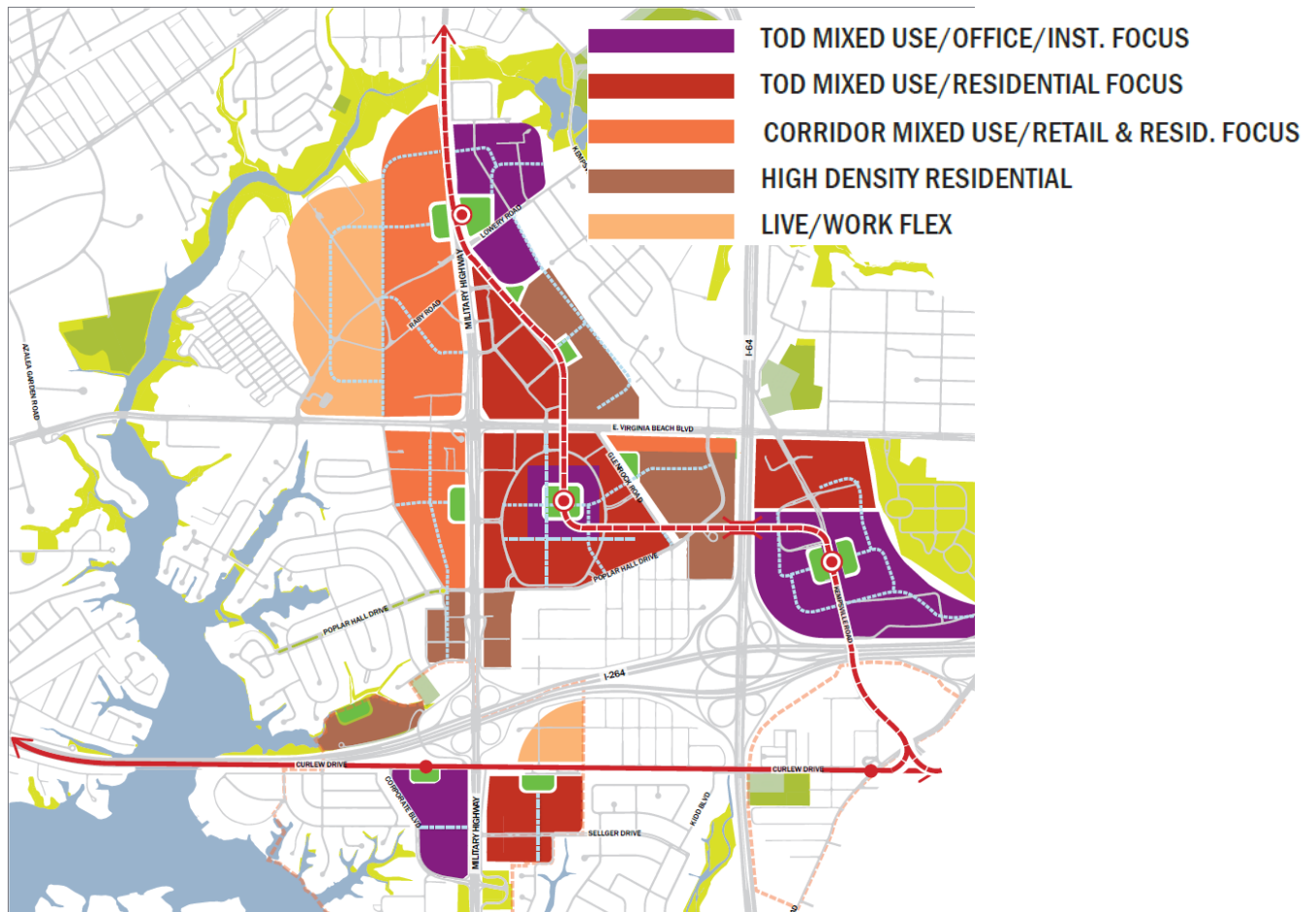


Figure 23: Alternative B.2 with associated future land uses

Future Land Uses for the Refined Alternatives

A series of five future land use types were developed as the basis for the future land use plans for each alternative. Three of the future land uses were based on a concept of mixed use, calling for a mixture of land uses centered around a “focus” of a predominant land use type, such as residential or office/institutional. The chief features and land use parameters of each land use type are listed below.

TOD Mixed Use: Office / Institutional Focus

- Located in the closest proximity to transit
- Often anchored by a core institutional use (hospital / civic center, etc.)
- Intended to become activity centers
- Highest density designation
- Encourages urban-style development, including active ground floor uses with commercial or office space on the upper floors

TOD Mixed Use: Residential Focus

- Located within close walking distance to transit and park spaces
- High density neighborhoods with many urban amenities

- Encourages urban-style development including active ground floor uses with apartments or condominiums on the upper floors
- Residential densities may exceed 45 units per acre if a specific level of affordable housing is provided

Corridor Mixed Use: Retail / Residential Focus

- Located along major corridors
- Typically allows either all retail or ground floor retail with residential above
- These properties are typically farther from the transit station and have less of an urban character compared to TOD Mixed Use
- Mixed uses are encouraged either within the same building or on the same site, but they are not required

High Density Residential

- Intended to be the most intensely developed residential zone
- The buildings are urban in their character, located near the street (with entrances oriented to them), and within walking distance to transit
- Parking is kept out of sight, with most intended as tuck-under or structured
- Residential densities may reach 45 units per acre and additional density may be permitted when affordable housing is provided
- Commercial uses typically not included
- Uses could include apartments and condominiums

Live-Work Flex

- Encourages ground floor business activity with residential units on the upper floors
- Depending on the environment, residential uses may be required, with non-residential uses optional
- Residential densities typically moderate with townhouse-type density
- Development could include a mix of uses or residential-only development such as row houses, apartments, or condominiums

Examples of Station Area TOD

In order to better visualize the basic land use types for the alternatives, examples from other parts of the country are presented as examples of the types of mixed use TOD envisioned for the core station areas. Some of the examples of existing TOD that could serve as models for this study area are shown below.

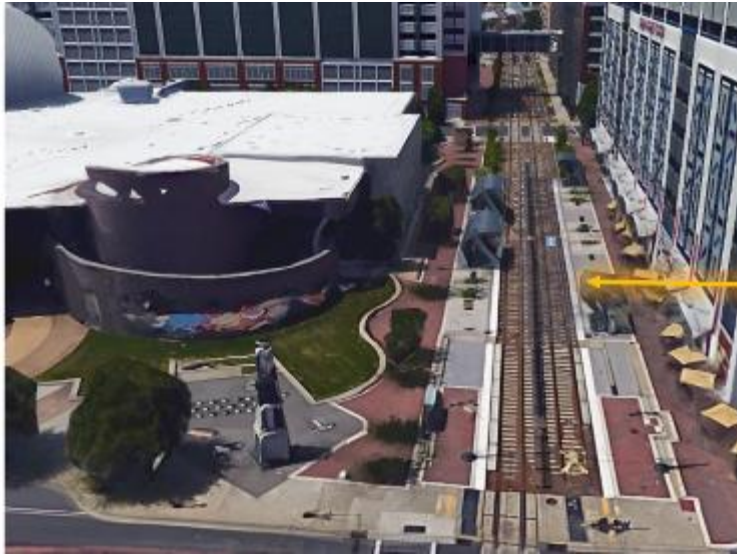


Figure 24: 7th St. Station – Charlotte, NC

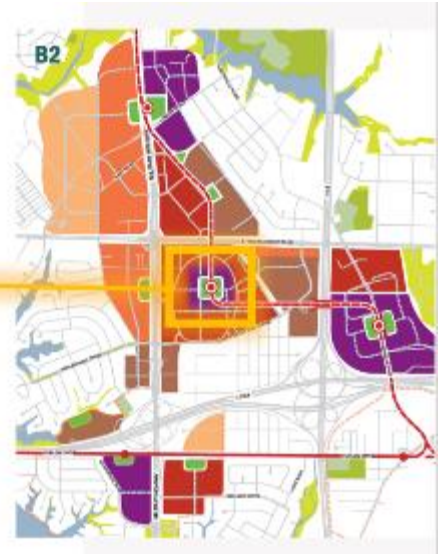


Figure 25: Downtown station—Plano, TX





Figure 26: First & San Carlos development—San Jose CA

Potential Phasing of Alternatives

In addition to detailing future land use, each alternative was considered from the perspective of potential long term phasing of development. A potential phasing sequence for each alternative is shown below in three basic stages:

- **Near term** – early development phase before light rail is developed but showing redevelopment around future station areas in anticipation of planned light rail
- **Mid-term** – development phase soon after the installation of light rail showing additional station area development and the consolidation of true TOD nodes at each station
- **Buildout** – final development phase showing redevelopment and infill of the whole study area once light rail and associated TOD have reached a mature stage

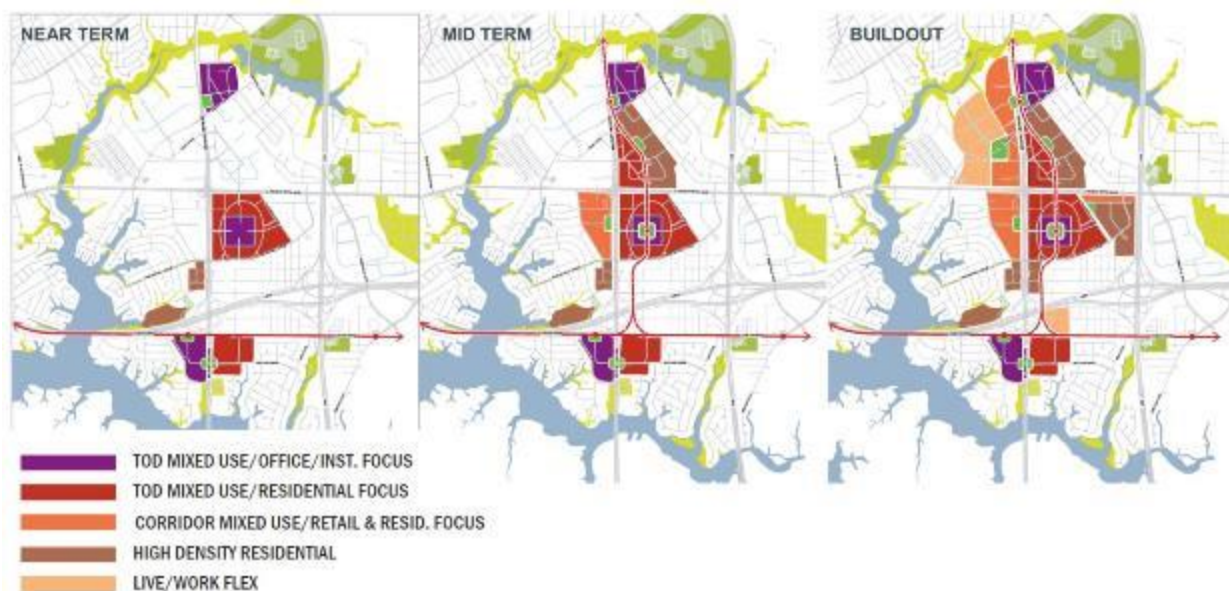


Figure 27: Alternative A.2 potential phasing



Figure 28: Alternative B.2 potential phasing

Buildout Comparisons for the Alternatives

In addition, each of the two refined alternatives (A.2 and B.2) were considered in terms of their ultimate buildout potential. The tables below show the land area by land use type for each alternative and the potential buildout in terms of dwelling units and floor area under each alternative scenario.

Table 6. Comparison of land areas by future land use type for alternatives A.2 and B.2

Land Use Type	A.2 (Acres)	B.2 (Acres)	Difference (A.2 vs. B.2)
Corridor Mixed Use/Retail & Residential Focus	127.2	175.1	(47.9)
High Density Residential	152.9	125.8	27.1
Live/Work Flex	106.8	102.8	4.0
New Parks/Civic Space	32.8	32.6	0.2
TOD Mixed Use/Office/Institutional Focus	86.9	200.4	(113.5)
TOD Mixed Use/Residential Focus	167.6	216.2	(48.6)
TOTAL	674.2	852.9	(178.7)

Alternative B.2 adds almost 180 additional acres of land by including the area to the east of I-64 in the project area. Not only does the addition of this area add to the land available for development, but because it includes the Sentara Leigh Hospital, it increases the potential for office and institutional uses. Table 7 further expands the buildout scenarios to include dwelling units and uses by square footage.

Table 7. Potential buildout scenarios for alternatives A.2 and B.2

ALTERNATIVE A.2					
Land Use Type	Acres	Dwelling Units	Retail Space	Office Space	Institutional Space
Corridor Mixed Use/Retail & Residential Focus	127.2	382	1,108,220	55,422	0
High Density Residential	152.9	3,824	133,249	0	0
Live/Work Flex	106.8	854	93,010	232,573	0
New Parks/Civic Space	32.8	0	0	0	0
TOD Mixed Use/Office/Institutional Focus	86.9	174	75,709	1,514,498	757,249
TOD Mixed Use/Residential Focus	167.6	2,514	292,011	73,018	0
TOTAL	674.2	7,748	1,702,199	1,875,511	757,249
ALTERNATIVE B.2					
Land Use Type	Acres	Dwelling Units	Retail Space	Office Space	Institutional Space
Corridor Mixed Use/Retail & Residential Focus	175.1	525	1,525,840	76,308	0
High Density Residential	125.8	3,144	109,557	0	0
Live/Work Flex	102.8	823	89,577	223,990	0
New Parks/Civic Space	32.6	0	0	0	0
TOD Mixed Use/Office/Institutional Focus	200.4	401	174,553	3,491,779	1,745,890
TOD Mixed Use/Residential Focus	216.2	3,243	376,736	94,203	0
TOTAL	852.9	8,136	2,276,263	3,886,280	1,745,890

Choosing an Alternative

Armed with the analysis of both possible scenarios, the advisory committee and City Planning Commission chose to move forward with the general layout of alternative B.2 because of its ability to meet project goals:

- Catalyzing economic development through TOD opportunities by creating three station areas
- Connecting and unifying the area with the creation of a new transit boulevard
- Revitalizing Military Circle Mall and JANAF development cores

With the preferred alignment in place, the draft vision was shared with the public during the second community meeting on March 1, 2016. Over 80 members of the public reviewed and provided feedback on the draft vision for the project. The only change from alternative B.2 requested was moving the northernmost station area from Lowery Road to the center of the JANAF shopping center to serve as a catalyst for the eventual future redevelopment of that area.



Figure 29: March 1st public meeting – review draft vision

Based on the input received from the public, stakeholders and advisory committee on the draft Vision Plan, the project team developed the final Vision Plan as summarized in the following section.

VISION FOR THE FUTURE

Final Vision Plan

The final Vision Plan expanded the future land uses and future light rail transit alignment from alternative B.2 into a series of urban streets, blocks, buildings and open spaces. This 50-year transformation plan was drafted to show the potential development for the entire area over the long term by creating a series of walkable urban neighborhoods anchored by the new transit boulevard and station areas.

The purpose of this Vision Plan is not to suggest detailed or specific development proposals for any one site or property in this area but to inspire residents, property owners, developers, and City leaders with an aspirational vision of what this whole area might someday become with the right combination of public and private investment over time.

While it's important to remember that such a plan relies on private investment following the public investment in infrastructure, it does not dictate specific changes to property or infrastructure. As stressed throughout this Vision Plan, the drawings and illustrations are aspirational and should not be interpreted as designed or engineered plans. Implementation of this Vision Plan necessitates further studies to better guide development decisions. This Vision Plan is a representation of what the future of Military Circle and Military Highway could look like in coming decades and will serve as a reference and guide for both public and private investments in the future.

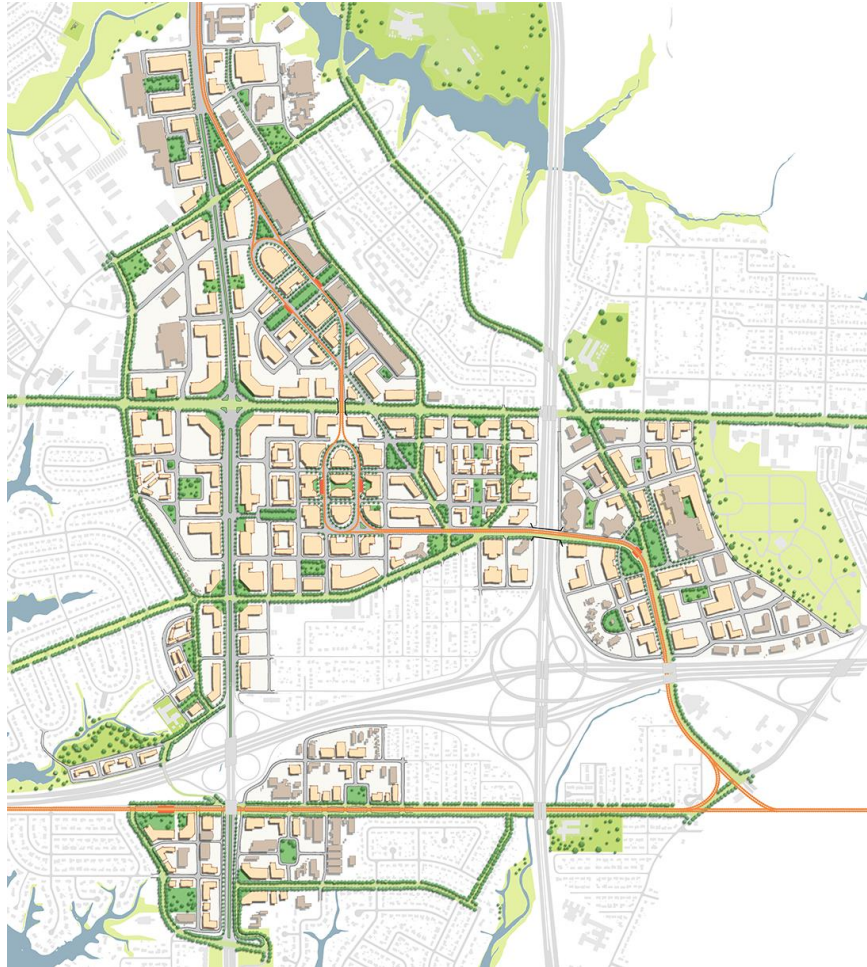


Figure 30. Final Vision Plan



Figure 31. Vision Plan with image examples

TYPES OF LAND USES

A Curbside Light Rail
with Urban Streetscape



B Transit Oriented Mixed Use /
Office & Institutional Focus



C Transit Oriented Mixed Use /
Residential Focus



D Corridor Mixed Use /
Retail & Residential Focus



E High Density Residential & Mid Density
Live/Work Focus



TYPES OF AMENITIES

Institutional & Civic Buildings



Pocket Parks



Urban Plazas



Walkable Streets



Protected Bike Lanes



Sub Areas

The overall Vision Plan is broken down into four sub areas, Military Circle, JANAF, Kempsville Road and Curlew Drive, to better detail the various elements in the plan. The following images and descriptions summarize the design concepts embodied in the Vision Plan for each of these areas.

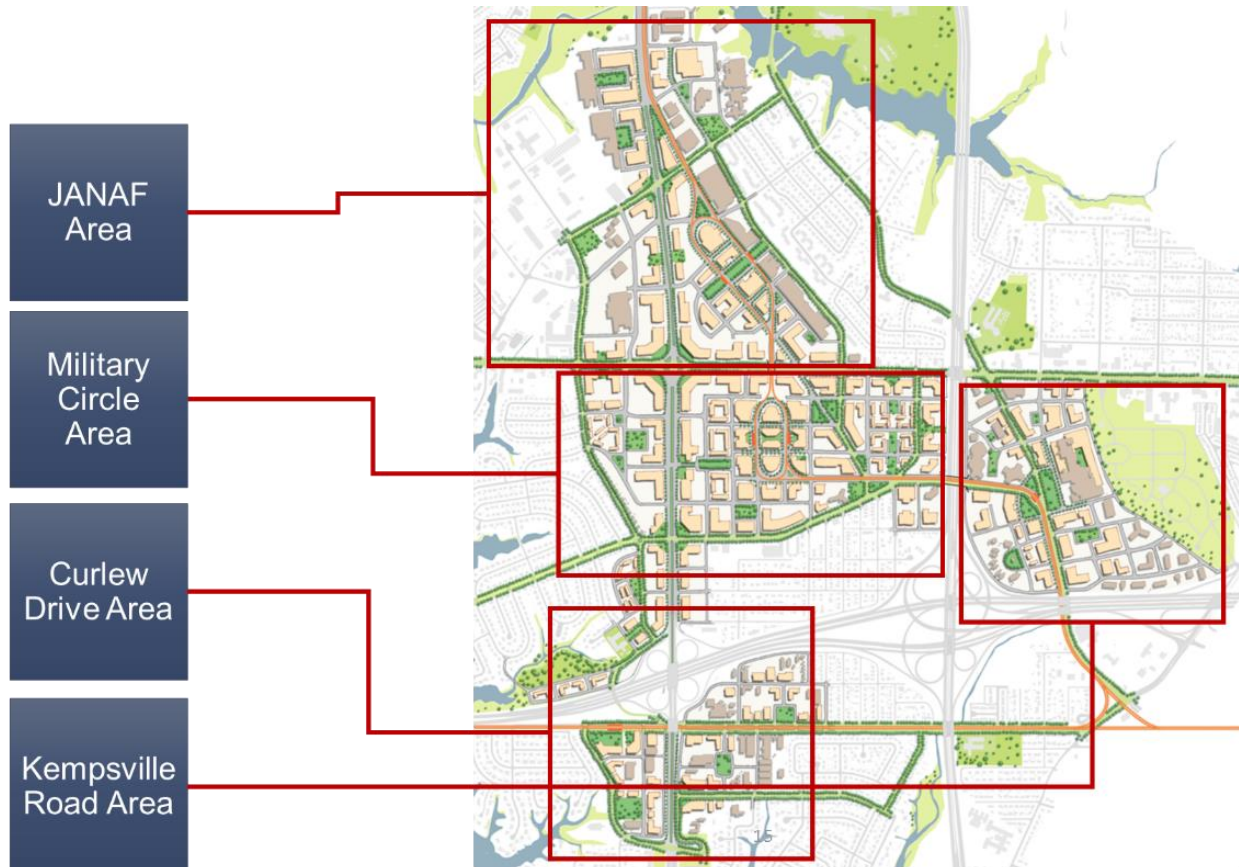


Figure 32. Sub Areas of the Vision Plan

Kempsville Road Area

The light rail extension would begin at or near the existing Newtown Road station—trains from the existing line from the west (Downtown) would either turn northward towards the Naval Base or continue eastward on a potential future corridor while trains from a potential future corridor from the east would either turn northward towards the Naval Base or continue westward towards Downtown. The addition of light rail heading north and east would make the Kempsville Road area a transit crossroads and create opportunities for TOD, especially as it relates to Sentara Leigh Hospital.

The Vision Plan shows the potential for the gradual transformation of the hospital into an urban hospital complex, where patients and staff could one day take light rail trains to the front door in a landscaped plaza and station area. It shows mixed elderly housing or medical suites near the hospital, and existing office and institutional uses becoming denser and more walkable in the future. It also shows a more multimodal Kempsville Road in the future, newly landscaped with light rail along the western side. This vision also explores the potential that the I-264 underpass could potentially be expanded to make room for light rail and a dedicated pedestrian and bike trail using the same underpass.

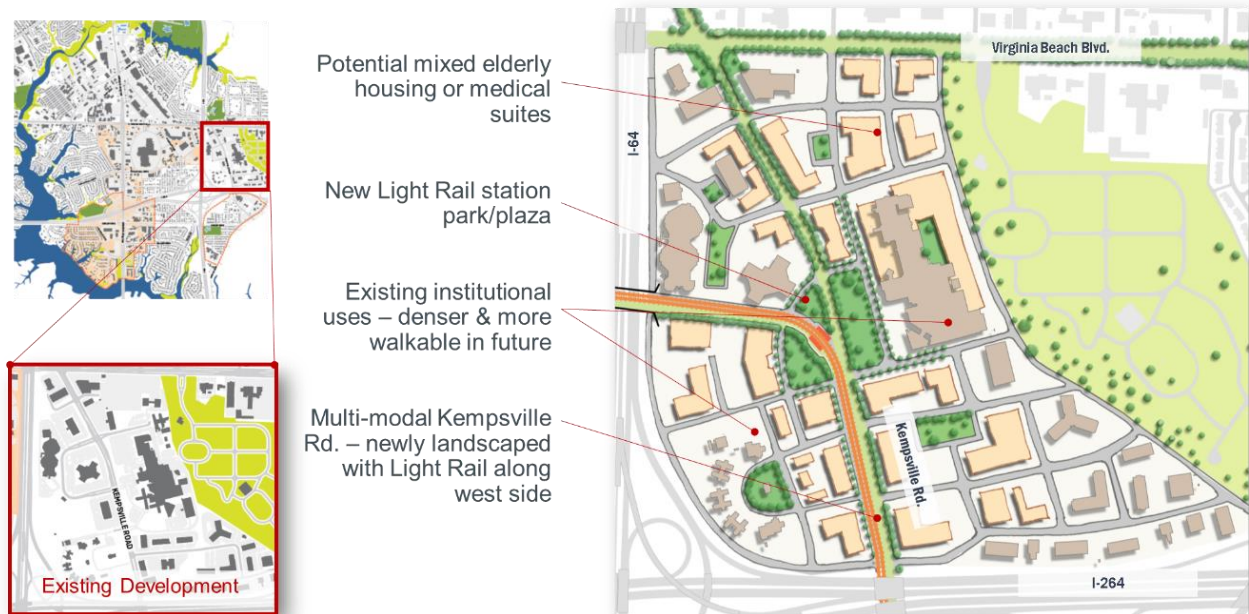


Figure 33. Vision Plan in the Kempsville Road area

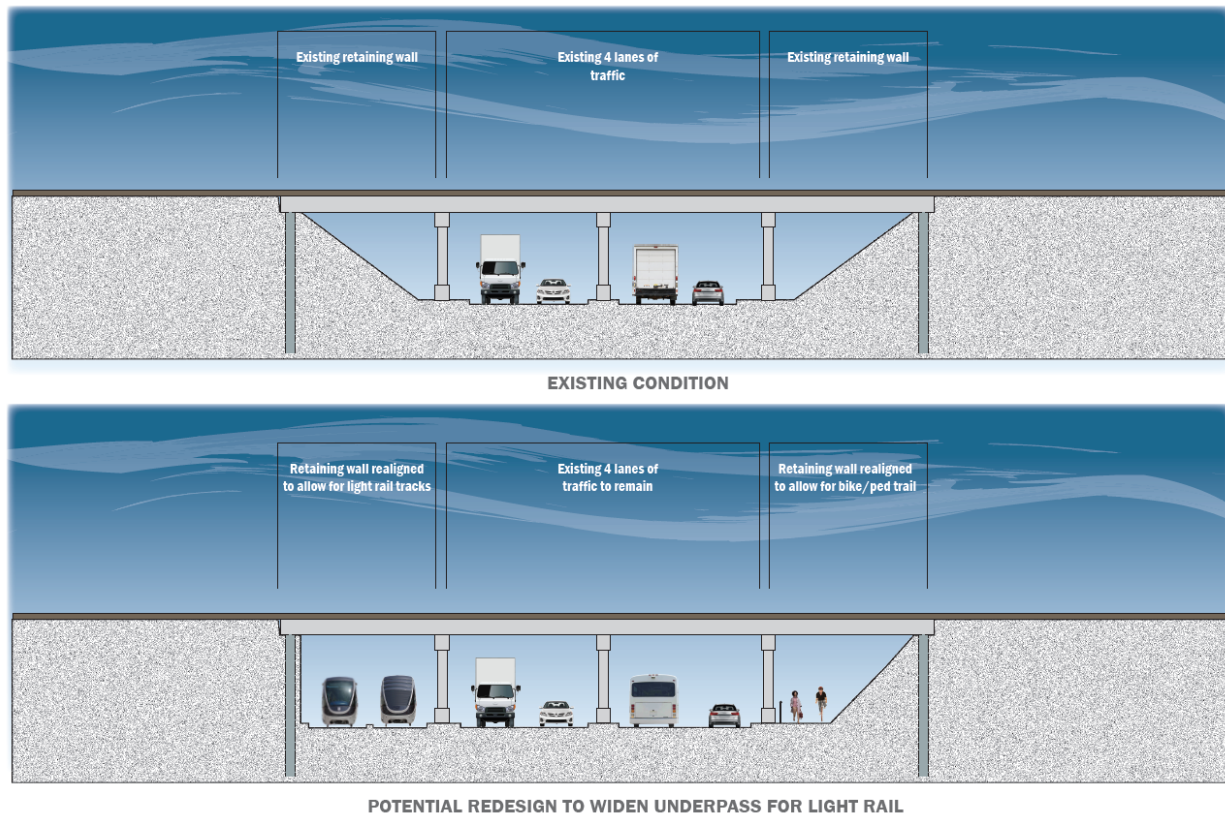


Figure 34. Potential Kempsville Road underpass reconfiguration concept (not to scale)

Military Circle Area

The light rail extension would fly-over I-64 and return to grade to the west of the interstate. The vision for the Military Circle area is for a completely redeveloped high density urban mixed use neighborhood. The vision for the Military Circle area in the center of the study area shows a long term transformation with corridor retail and residential uses along the highways, a dense urban center with office and institutional redevelopment at the light rail station, and extensive pocket parks and plazas, with residential mixed use in high density neighborhoods at the edges. A small transit loop or “one-way couplet” offers the opportunity for narrower transit boulevards by splitting the northbound and southbound tracks, as well as introducing the potential for a circulator train to travel between Military Circle and JANAF during off-peak hours.

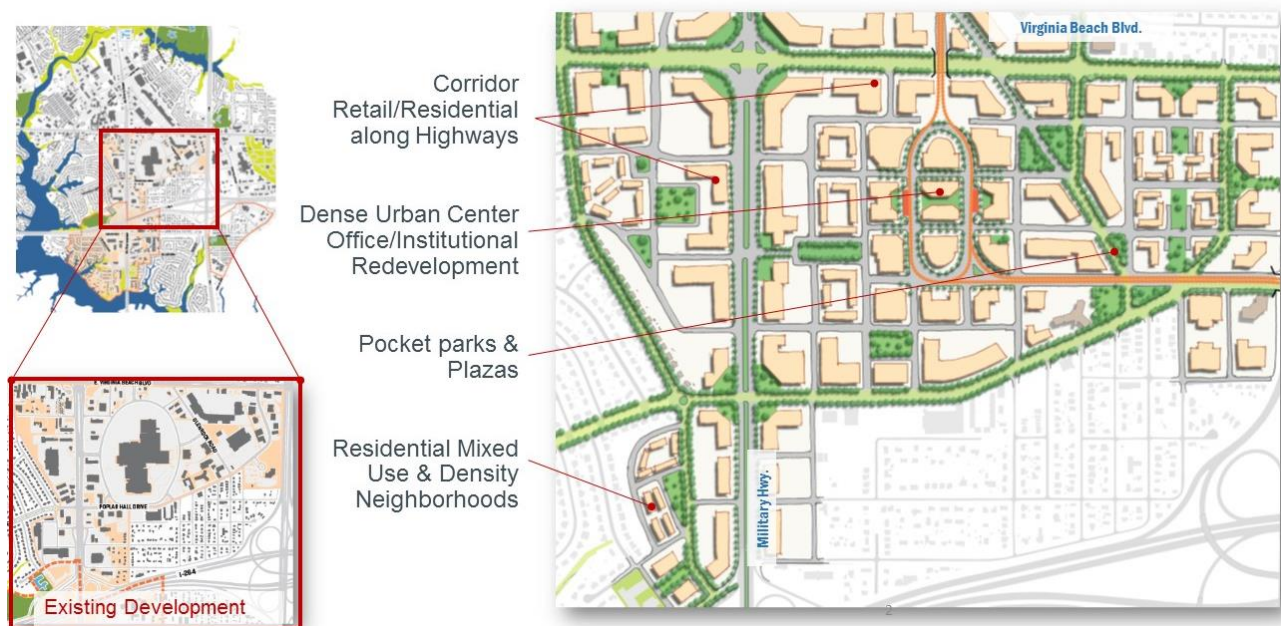


Figure 35. Vision Plan in the Military Circle area

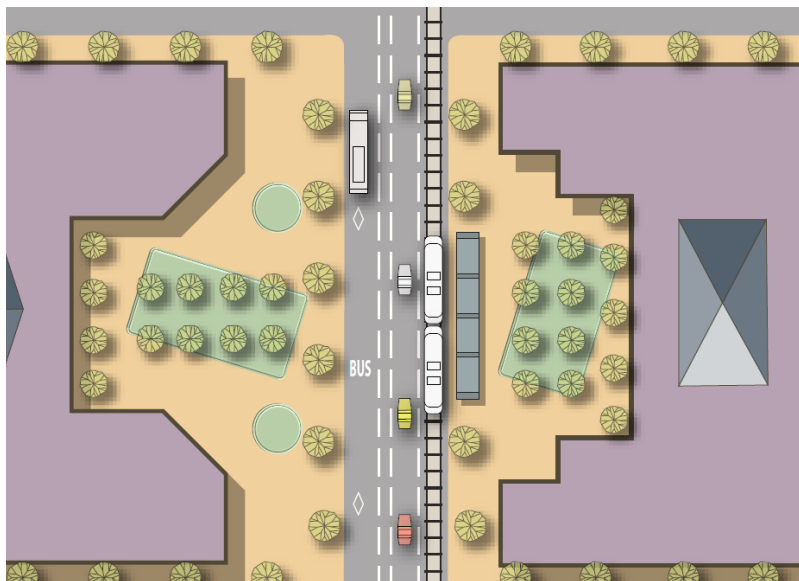


Figure 36. Concept plan for the Military Circle station area

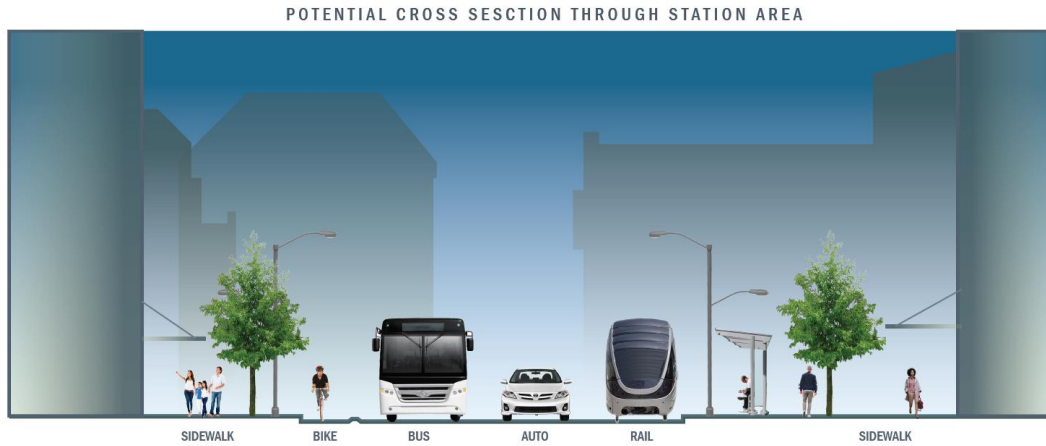


Figure 37. Potential cross section through station area

What is a couplet?

A couplet, in terms of light rail, is a pair of one-way streets, each carrying a set of light rail tracks, approximately one block apart. A couplet allows for more compact right-of-way that is more pedestrian-friendly with fewer travel lanes to cross and the scale of the street slows traffic. A transit couplet also allows for greater operation flexibility and gives an off-peak circulator option.



Figure 38. Light rail couplet—Portland ORO

JANAF Area

Light rail continues northward from the Military Circle area, potentially bridging over East Virginia Beach Boulevard, to enter the JANAF area. The Vision Plan for the JANAF area shows a design concept that converts the existing JANAF shopping center and some of the existing big-box retail to mixed use lifestyle centers where retail is combined with other services such as restaurants, movie theaters, or apartments. Mixed office and residential are shown along the new transit boulevard, and a new urban center is created at the station area, with a similar transit couplet with the potential for an off-peak circulator traveling south to the Military Circle area.

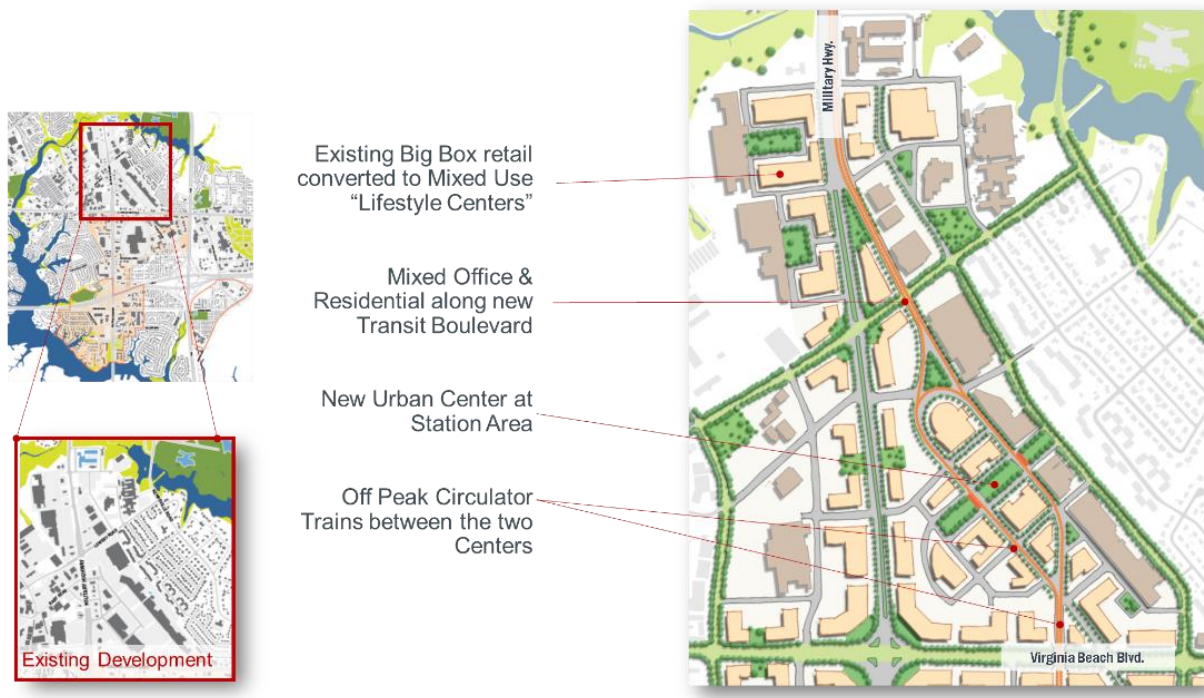


Figure 39. Vision Plan in the JANAF area

Curlew Drive Area (Military Highway Station)

The final subarea detailed by this Vision Plan is for the Curlew Drive area around the existing light rail station at Military Highway. The vision for this area includes new development filling in vacant land, with potential redevelopment of some of the older developments, such as those in the area north of Curlew Drive. It shows corridor retail and residential along North Military Highway, office and institutional redevelopment to the southeast, and pocket parks and plazas throughout.



Figure 40. Vision Plan in the Curlew Drive area

Potential Buildout and Value Capture Analysis

With the vision in place, two potential buildout projections were explored: a high and low scenario. While it is not possible to predict when full buildout of the vision might occur, this analysis looked at the redevelopment potential at full buildout. The low buildout scenario assumes densities and development intensity that could occur if light rail does not come to the area. The high buildout scenario assumes higher densities and intensities with a light rail extension or other high capacity transit to the area.

Under the low buildout scenario, the number of residential dwelling units would increase by approximately 2,500. Non-residential square footage would increase by 5.9 million square feet. Under the high buildout scenario, the number of residential dwelling units would increase by approximately 5,800. Non-residential square footage would more than double, increasing by approximately 8.9 million square feet.

Table 8. Potential buildout by scenario

LOW SCENARIO			
	Existing	Future	Change
Residential (dwelling units)	463	3,015	2,552
Non-residential (square feet)	7.7 million	13.6 million	5.9 million
HIGH SCENARIO			
	Existing	Future	Change
Residential (dwelling units)	463	6,226	5,763
Non-residential (square feet)	7.7 million	16.6 million	8.9 million

Based on the potential buildout analysis, a potential value capture of the total value of real estate at buildout was also calculated. Total value capture from the Vision Plan was calculated based on both the low and high scenarios. Value capture is a calculation of the value of new real estate that could result from full buildout using present day dollars. The result shows that the Vision Plan could potentially result in approximately \$1.3 to \$2.4 billion in new development, in net present value at full buildout.

Table 9. Potential value capture by scenario

LOW SCENARIO
\$1.26 billion
HIGH SCENARIO
\$2.37 billion

Conclusion

A 50 YEAR TRANSFORMATION

Military Circle Mall was built almost 50 years ago, and JANAF almost 60 years ago. What will the next 50 years look like for these shopping centers and for this whole area? With the potential for future light rail extensions in this vicinity in the coming decades, the City of Norfolk has an opportunity to transform this area into vibrant, walkable new urban centers over the next 50 years. Private investment in concert with public improvements will be needed to implement this vision. The Vision Plan summarized in this report is the start of a 50-year Vision for transformation of this area. As a potential blueprint for that transformation, it is hoped that this plan will have a lasting impact on the Military Circle / Military Highway area for decades to come.

As a final expression of the aspirational vision for transformative change, following is a three-dimensional computer model of what the area around the future potential Military Circle station could become. The following images illustrate this potential transformation – from a one story, single use suburban mall into a vibrant, dense multi-story center with mixed uses, walkable

streets, a light rail system that connects to the surrounding region and a revived and bright new economic future for the area.

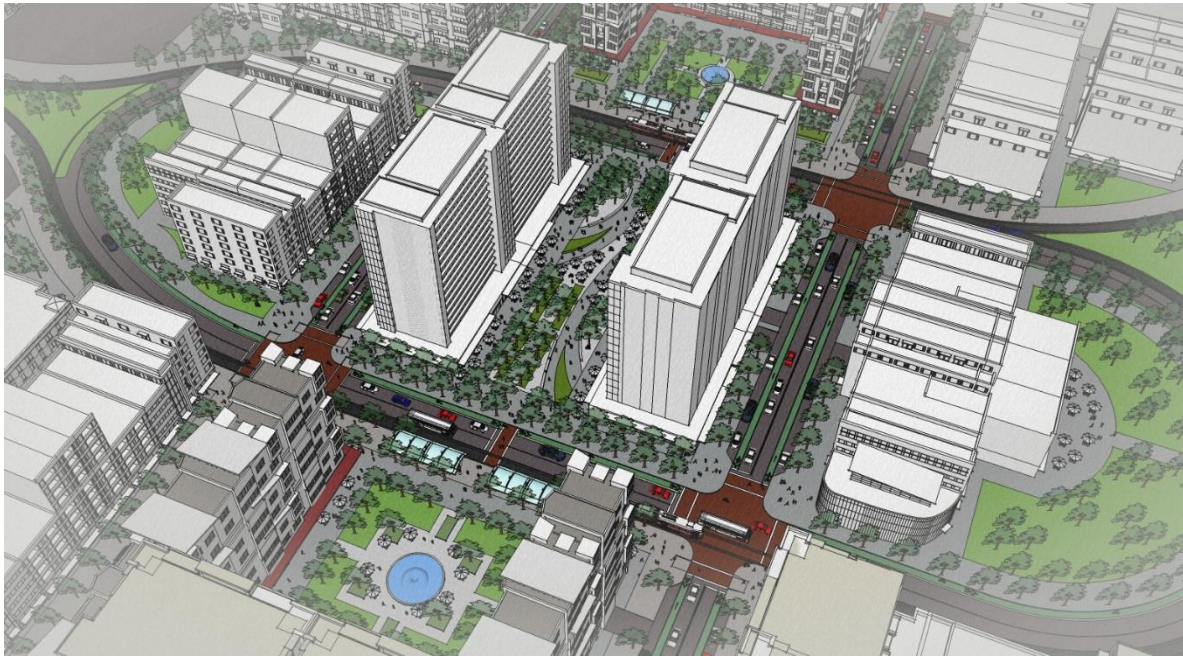


Figure 41. Visualization of the future of the Military Circle area

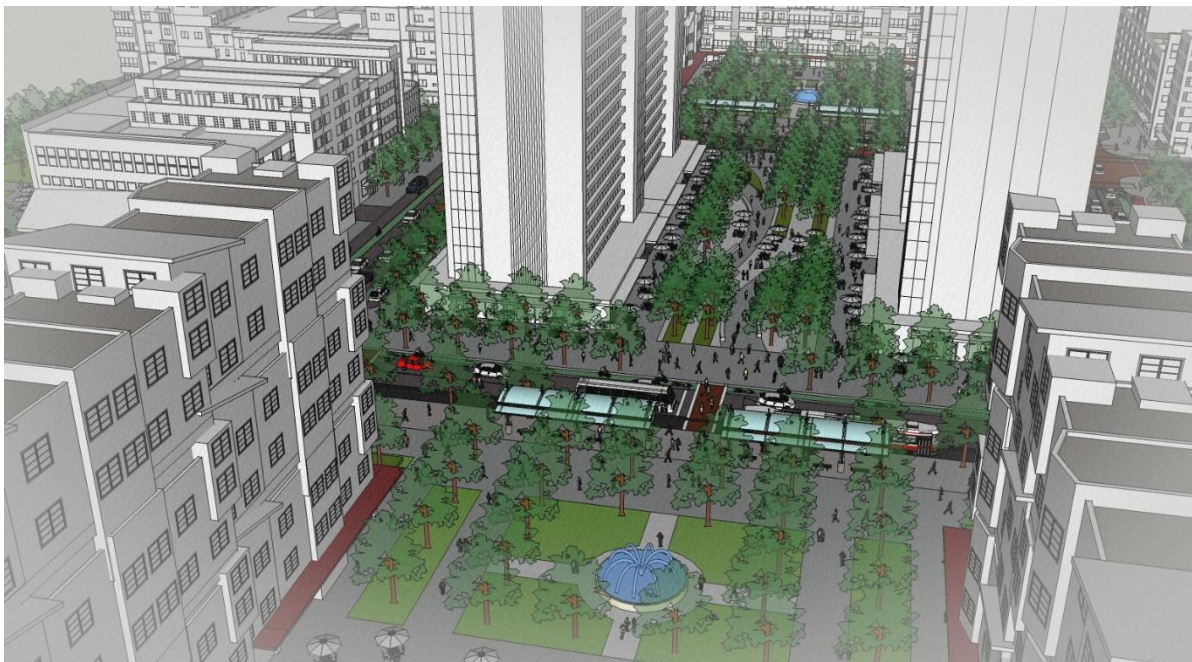


Figure 42. Visualization of the future of the Military Circle station area focused on station area

IMPLEMENTATION FRAMEWORK

Achieving this vision for the Military Circle / Highway UDA will require many actions by various groups and individuals over a timeframe stretching out as many as 50 years. The overall coordination of these actions will be essential to the success of this Vision Plan. While there may be necessary deviations from the Vision Plan, it should still be used in principle to steer the process. Following are a series of actions, grouped by general category, that should be undertaken to guide the transformation of this area.

Coordination Framework

Action 1. Coordinate redevelopment efforts with planning for the extension of light rail or other high capacity transit and other infrastructure planning.

Realizing the vision for the Military Circle / Military Highway UDA will require discipline and coordination, including coordination throughout the planning, design, engineering and implementation of the light rail extension. While on-going redevelopment of the Military Circle / Military Highway UDA and extension of light rail may proceed at different paces, both initiatives remain interlocked at key milestones during the light rail planning process. Figure 43 outlines the “Critical Path” that guides the implementation of the light rail extension and the creation of a new urban center (see Appendix A for more detailed analysis).

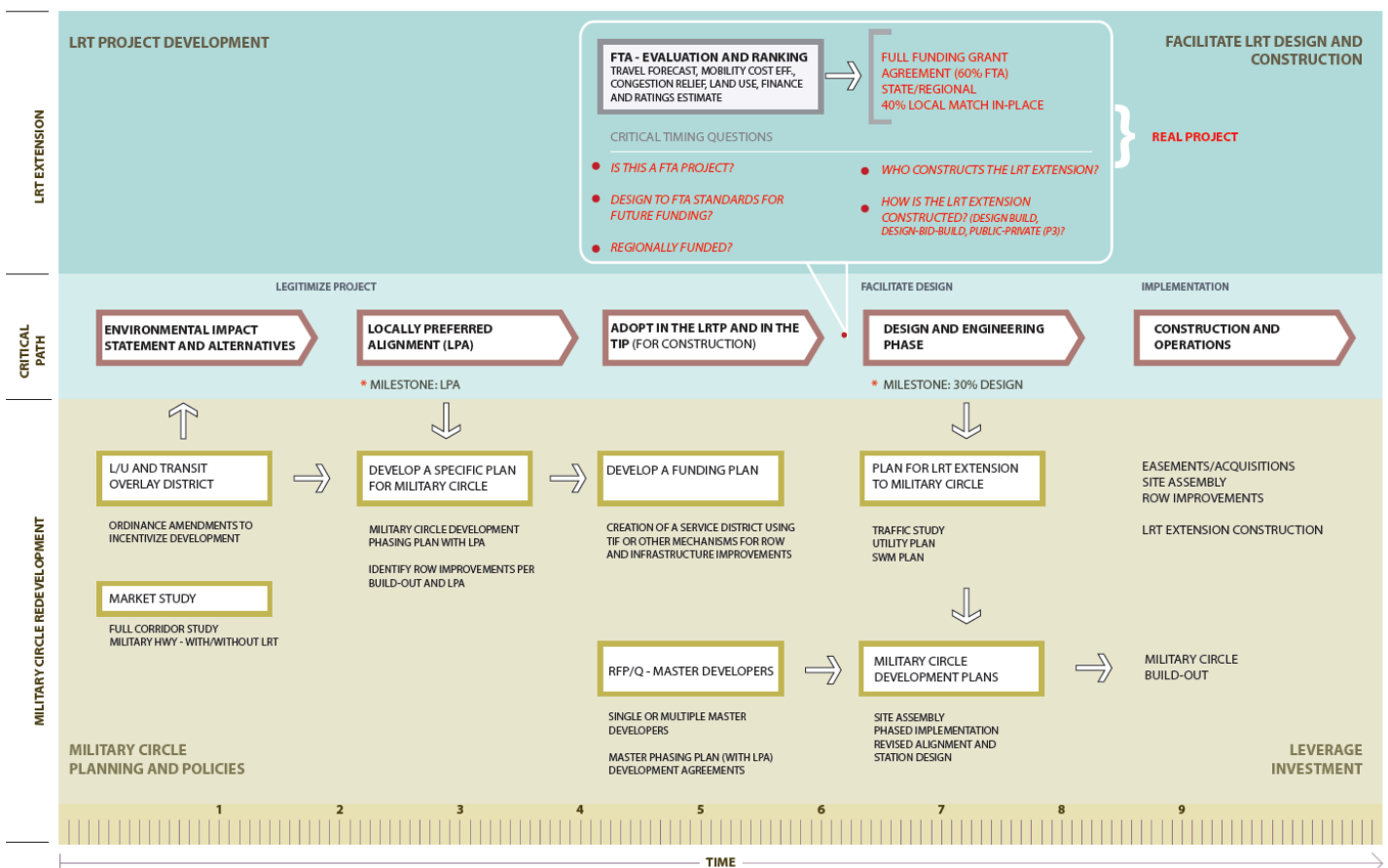


Figure 43. Critical path for project coordination

Action 2. Do not approve short-term developments that will impede the realization of the long-term vision.

Transformation of the study area will take a generation or two. Land use decisions, infrastructure investments and other actions will occur at various points throughout the redevelopment process. Rights-of-way will need to be retained, long before light rail or new roads are introduced. In addition, it will be important to know how to respond to land use requests that may not agree with the very long-term vision for this area. Some uses – requiring limited construction or investments that can be amortized over a shorter period of time – may be appropriate in the interim, until the long-term vision comes to fruition.

Transportation Framework

Action 3. Conduct studies (DEIS) and coordinate planning necessary for the determination of the locally preferred alternative for an east side alignment for the extension of light rail or other high capacity transit to Naval Station Norfolk.

Given the pivotal role that the light rail extension could play in the realization of the vision for the study area, one the first steps in implementation will be to move forward with the planning for an extension of light rail or other high capacity transit. Determination of the locally preferred alternative for an east side alignment should be informed by this Vision Plan. (Appendix A outlines the various steps involved in extending light rail to Naval Station Norfolk). Note that the actual introduction of light rail to the area could occur well into the future but other redevelopment efforts can move forward as long as necessary right-of-way is retained or created.



Figure 44. Tide light rail in Norfolk

Action 4. Advance preliminary engineering and final environmental documentation for the locally preferred alternative for the extension of light rail or other high capacity transit and develop a project funding plan.

If the locally preferred alternative for light rail includes a path through the study area, then the continued planning for the addition of light rail should better inform the redevelopment of the Military Circle area. The identification of necessary rights-of-way through additional engineering studies will better outline the transportation pattern for the study area.

Action 5. Conduct transportation studies needed to best realize the Vision Plan including a future major street network framework, layout, and functionality analysis, including the potential reconfiguration of the Military Highway and Virginia Beach Boulevard and the existing interchange.

Before finalizing planning for a new street pattern and supporting infrastructure, numerous transportation studies may need to be completed to evaluate the impact of the introduction of light rail and the creation of an entirely new land use pattern. As redevelopment projects and

opportunities are considered, it is essential that the geography of the future street network be adequately identified in order to understand the future footprint of development sites and the relation to streets and to protect necessary rights-of-way for new or adjusted streets.

As part of the consideration of the long term vision for the study area, exploration of future reconfiguration options for Military Highway and Virginia Beach Boulevard is needed. The transformation of this area into a denser urban center with walkable neighborhoods is a challenging one considering that the area is bisected by two major 6-10-lane relatively high speed arterials. To realize the vision for the area, it will be important to investigate opportunities to reduce cross-sections of these roadways, while meeting future needs. These roadways once served a more active area and higher traffic volumes, but also did so in a different era with regard to level of service expectations for vehicles. Both roadways have significant excess capacity today and as such would be candidates for narrowing today if traffic were not expected to grow, and could be in the future depending on development levels. This future street network analysis and development exercise would have as one of its primary goals to serve the needs of all users, balancing needs for local and through traffic with those for pedestrians, cyclists and transit. Creating walkable streets and intersections, including along these major arterials, could involve simple lane reductions, revised street configurations and alignments, or both. The existing framework is not one that necessarily lends itself to providing high vehicular capacity while also serving the other users, compared to other possibilities.

In addition to considering creating narrower cross sections for these major arterials, their intersection needs to be another point of consideration for change. The intersection is currently a grade-separated urban single point interchange (SPUI), with Military Highway passing over Virginia Beach Boulevard. This configuration contributes to some of the street issues related to street width and lack of walkability and the utility of the streets as “places” supportive of development. The first SPUI constructed in Virginia, in retrospect it has not been considered without its negatives, including modifications for safety reasons that prevent it from reaching its intended capacity. The alternatives below show some concepts for the reconfiguration of that intersection to allow for at-grade options that would fit more appropriately with the vision of this area for a more walkable urban center. However, it should be noted that these ideas were not taken beyond a concept stage and would need further analysis to determine the feasibility of each.



Figure 45. Existing grade separated intersection at Military Highway and Virginia Beach Boulevard

One possible solution could be the conversion of the existing Military Highway and Virginia Beach Boulevard intersection to an at-grade signalized intersection with internal “quadrant intersection” system of loops.



Figure 46. “Quadrant Intersection” with system of loop streets (example Rt. 4, Fairfield, OH with single loop)

Another option could be the conversion of the existing Military Highway and Virginia Beach Boulevard intersection into a “one-way couplet” that splits each highway into pairs of one way streets that create a developable site in the place of the former intersection.



Figure 47. One Way Couplets (example San Elijo Hill, CA)

Supporting Infrastructure Framework

Action 6. Outline a new street pattern to create “green and complete streets” with a walkable urban grid and connections to surrounding areas, and identify needed right-of-way improvements to support future development.

The Vision Plan outlines a potential new street grid which breaks the area into walkable blocks, resulting in a new roadway grid system that ties back to Virginia Beach Boulevard and Military Highway and creates connections to the larger area. This new street network embraces “complete streets” elements that balance new roadways with equal priority between vehicles,

pedestrians and bicyclists. Included in the design of a new street pattern would be the creation of safe access for surrounding communities, including crosswalks, sidewalks and bike facilities.

Beyond designing streets that safely accommodate all users, communities across the country are realizing the “green” potential of their streets. Making transportation systems more sustainable involves minimizing environmental impacts by making streets greener in both appearance and function. Of particular concern are drainage and stormwater runoff issues too common in traditional street design. Optimal stormwater management looks beyond simply removing rainfall as quickly as possible, which risks negative environmental impacts associated with both stormwater quality and quantity, like polluted runoff, sedimentation, and bank erosion. Instead it focuses on efforts to retain and treat – or even eliminate – runoff at the source through cost-effective green infrastructure.

Action 7. Locate civic facilities and recreation amenities throughout the area to serve both the new community and the surrounding neighborhoods.

Given that the study area is not at risk of long-term inundation from sea level rise and that the City plans to focus major infrastructure investments on the most resilient areas, the study area is a key location for new civic and public facilities. This could include libraries, schools and recreation centers, as well as parks and other recreation amenities, both public and private. Note that the *City of Norfolk Recreation Master Plan* (2012) has identified the need for a recreation center in the Poplar Halls area. This could be an early investment in implementing the Vision Plan.



Figure 48. Civic facilities and amenities

Key to the success in creating these amenities will be their accessibility, both internally and to the surrounding neighborhoods. Included in the planning for these potential civic amenities should be an access plan for surrounding areas, including crosswalks, sidewalks, and bike facilities.

The Vision Plan illustrates a general distribution of parks, plazas and open space that should serve as a guide in the overall development of the new urban center. This new system of parks should be designed to enhance the pedestrian experience as well as contribute to sound environmental practices such as filtering and reducing runoff. In addition, open space and parks should be designed to minimize ongoing maintenance needs. Finally, these new civic facilities and parks, plazas and open spaces should serve as prominent visual elements in the new community.

Action 8. Address stormwater management issues to support new development.

Norfolk strives to become a model for responsibly addressing resilience as a part of the Vision 2100 effort. Even though the study area is not at risk of long-term inundation from sea level rise, it is still important that innovative approaches to stormwater management, including mandating or incentivizing green infrastructure techniques, be employed in the study area, including both the public and private sectors. Green infrastructure is a cost-effective, resilient approach to managing water by reducing and treating stormwater at its source using vegetation, soils, and other elements and practices to restore some of the natural processes required to manage water and create healthier urban environments. At the city scale, green infrastructure is a patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water.



Figure 49. Example of sustainable streetscape, Chicago IL

A plan needs to be in place so that a coordinated approach to stormwater management can be implemented in phases that correspond to new development.

Action 9. Outline utility improvements needed to support new development.

Just as with stormwater infrastructure, water and sewer systems, as well as private utilities, need to be in place to support new development. This also needs to be coordinated with a phased approach to development.

Action 10. Develop a parking strategy to accommodate a phased redevelopment of the area.

As Military Circle redevelops, a particular outcome will be the gradual conversion of asphalt parking lots to mixed use development, resulting in a reduction of surface parking. Developing structured parking may not be financially feasible early in the development formation. New mixed use development that is defined by several stories of residential over commercial will most likely have parking located at-grade, tucked into or enclosed within the development footprint. However, this development pattern is not sustainable over the long term, from both a smart use of land perspective and the desire to have compact mixed use development.



Figure 50. Active uses wrap structured parking--Houston TX

The City will need to have a strategy in-place that gradually guides development from surface parking, to enclosed surface parking, to encapsulated parking wrapped by active uses. The market will primarily drive this trajectory, based on demand, which must be great enough to force a shift in construction typology, and facilitated by whether the Military Circle area is a desirable location where people want to work and live.

The City has several strategies that it could pursue that have been applied in other municipalities, including City construction of above grade parking structures in partnership with developers, splitting costs to provide public parking and parking intended for private use.

Implementation Tools

Action 11. Develop and adopt zoning tools to create a framework as a walkable urban setting, centered on transit.

Zoning is one of the best tools available to create a walkable urban setting. Zoning tools governing building placement, massing, and height, as well as street level treatment such as transparency, ground floor uses, and first floor scaling, need to be developed for the new district. Zoning regulations should be directly tied to transit accessibility, and scaled appropriately to take advantage of TOD opportunities. Norfolk already has a TOD zoning district and will be adding a resiliency overlay district, either or both of which could be applied or modified for this area. A key part of this new or modified zoning district would be to create a framework for managing the transitions to surrounding areas, especially those areas that may be developed at a lower intensity than the new urban center.

Action 12. Create a pattern book to give guidance to new development to support the creation of walkable urban spaces and the integration of green infrastructure.

Norfolk utilizes pattern books for development in Downtown, as well as for various neighborhoods throughout the City. The purpose of the pattern book would be to coordinate development to arrive at appropriately-scaled spaces that create welcoming urban spaces and carefully integrate green infrastructure elements. Pattern books can give guidelines for development by type of urban space to be created, such as a neighborhood versus a commercial street, and by building element, such as full block versus end block, and include details regarding façade treatment, articulation and massing.

Action 13. Identify and pursue funding options to support the development and maintenance of necessary infrastructure to support the plan.

Funding options need to be identified that can finance necessary public improvements over the course of build-out as well as contribute to the ongoing maintenance of these facilities. A number of strategies could be articulated in a funding plan. For example, the funding plan could propose a project boundary over the parcels that comprise the Military Circle area as a district that utilizes

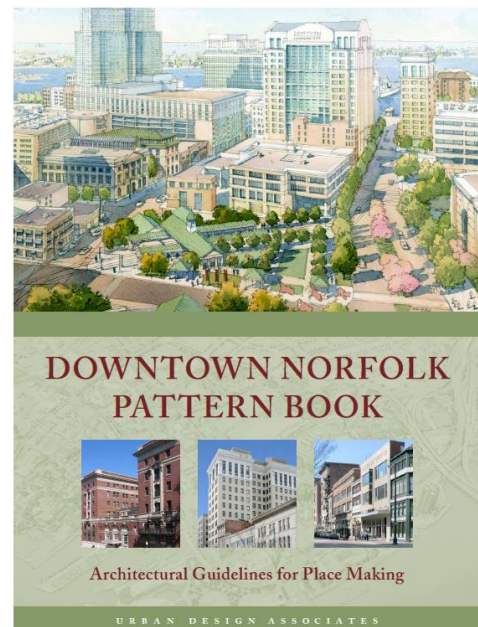


Figure 51. Downtown pattern book

tax increment financing (TIF). TIF is the ability to capture and use most of the increased local property tax revenues from new development for a defined period of time to implement public right-of-way infrastructure improvements to support the build-out of the Military Circle area. A TIF district could be an incentive to attract development by offering a long term financing mechanism for infrastructure improvements that increases as more development is realized. A business improvement district (BID), a defined area within which property owners and/or tenants opt to pay an additional tax in order to fund projects or provide services within the district's boundaries, is another method to raise ongoing maintenance funds.

Action 14. Explore incentives necessary to realize the plan.

TIF funding was discussed as an incentive in the previous action, but other incentives, such as density bonuses and tax abatement could be explored, to the extent that development proposals support the realization of the Vision Plan.

Action 15. Leverage city investments as a catalyst for private sector investment.

Infrastructure investments, including streets, utilities, parks and open space, schools, libraries, and recreation centers should all be leveraged to encourage private sector development. But two additional potential investments—light rail and structured parking—should be seen as key incentives for new development.



Figure 52. Conversion of former JC Penney to office space

In addition, Norfolk's investment in the Military Circle area extends beyond just infrastructure—the City's Economic Development Authority purchased the former JC Penney anchor store and owns not only the building, but a portion of the mall's parking area. As a property owner, the City has the ability to be a leader in determining the future of this area. In order to steer the Military Circle area in a new direction, the City is in the process of converting the former department store space into office space which will bring hundreds of new jobs to the area. The model, of converting large floor-plate retail space to office space, is being studied for the other former anchor stores in the mall. This short to mid-term repurposing of the existing portions of the mall should be factored into the phasing plan for redevelopment of the mall.

Action 16. Develop a branding strategy that supports the creation of a new identity for the area.

In order to better market the area for redevelopment, a branding strategy is needed, possibly beginning with a new name. This study process led to a number of conceptual names and logos for the area, but none were fully finalized. The ultimate branding of the area should be left to future efforts and could be the subject of design competitions or contests.

Action 17. Outline a phased buildout approach for the redevelopment of Military Circle Mall and the surrounding area and the introduction of light rail.

The vision for an area of this size and complexity will require a phased approach. This 40-50 year build-out plan will take time to realize, and changes to the land use and development pattern can be expected over a number of decades. While the Vision Plan shows a full buildout, the timing of that buildout will include factors that are especially hard to predict, such as the timing of public infrastructure investments outlined in earlier actions, particularly the investment in light rail, and the economic and market climate for private development in the coming decades. Appendix B outlines one potential phasing approach that can be used as a model moving forward with planning efforts.

Action 18. Identify and implement the appropriate oversight mechanism to facilitate the redevelopment of Military Circle Mall and the surrounding area.

The full build-out of the Military Circle area will be complicated and will take time and long term commitments. The City has several options to ensure that the complex assemblage of parcels and orderly phasing of new development promotes the highest and best use of land, starting with the redevelopment of the mall, with the gradual phasing of new development, while anticipating the arrival of a light rail alignment.

There are several strategies that the City could pursue. The City could participate in a public-private venture with the formation of a development corporation composed of key property owners, businesses, stakeholders, technical and financial advisors, and representatives from the City. The City owns a key parcel of land within the mall and has a direct financial stake and leverage in the redevelopment of the entire site. More importantly, the City's financial stake provides a sense of certainty and minimizes the perception of risk. The development corporation could serve as the driving force between the City and property owners for assemblage of land, the orderly redevelopment of the mall and gradual new development for the entire site, while gaining commitments of prospective businesses and investors. This entity could also identify support infrastructure needs to help generate the private investments.

Another option is to have a third-party entity take the lead in managing the development of the Military Circle area. In this scenario, the City would work with other property owners to solicit a master developer(s).

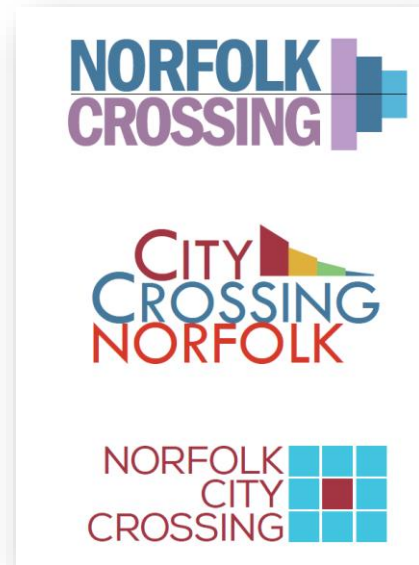


Figure 53. Branding ideas

Implementation Matrix

The following matrix summarizes action items and the entities responsible for them. Its organization reflects the specific actions outlined in this plan, and it includes timeframes and approximate cost ranges for each action.

The timeframe divides actions into four categories:

- Ongoing
Routine and continuous with no specified end date
- Immediate
Completed within 3 years
- Short-Term
Completed within 3 to 5 years
- Mid-Term
Completed within 5 to 8 years
- Long-Term
Will take longer than 8 years to complete

Note that the timeframes are for completion of an action, not its initiation. Many actions will begin sooner but will not be complete until the entire plan is complete.

Cost categories are:

- Existing resources
- Up to \$100,000
- \$100,000 to \$250,000
- \$250,000 to \$1 million
- Over \$1 million
- Several million

Table 10. Implementation Matrix

ACTION		LEAD RESPONSIBILITY	TIMEFRAME FOR COMPLETION	COST CATEGORY	COMMENTS
COORDINATION FRAMEWORK					
1	Coordinate redevelopment efforts with planning for the extension of light rail or other high capacity transit and other infrastructure planning.	Planning	Long-Term	Existing Resources	
2	Do not approve short-term developments that will impede the realization of the long-term vision.	Planning	Ongoing	Existing Resources	
TRANSPORTATION FRAMEWORK					
3	Conduct studies (DEIS) and coordinate planning necessary for the determination of the locally preferred alternative for an east side alignment for the extension of light rail or other high capacity transit to Naval Station Norfolk.	Hampton Roads Transit	Immediate	Several million	Already funded
4	Advance preliminary engineering and final environmental documentation for the locally preferred alternative for the extension of light rail or other high capacity transit and develop a project funding plan.	Hampton Roads Transit	Mid-Term	Several million	
5	Conduct transportation studies needed to best realize the Vision Plan including a future major street network framework, layout, and functionality analysis, including the potential reconfiguration of the Military Highway and Virginia Beach Boulevard and the existing interchange.	Public Works	Short-Term	\$250,000 to \$1 million	
SUPPORTING INFRASTRUCTURE FRAMEWORK					
6	Outline a new street pattern to create “green and complete streets” with a walkable urban grid and connections to surrounding areas, and identify needed right-of-way improvements to support future development.	Public Works, Recreation Parks and Open Space, Planning	Mid-Term	\$100,000 to \$250,000	Funding for construction in Action 18
7	Locate civic facilities and recreation amenities throughout the area to serve both the new community and the surrounding neighborhoods.	Public Works with operational departments	Mid-Term	\$100,000 to \$250,000	Funding for construction in Action 18
8	Address stormwater management issues to support new development.	Public Works	Mid-Term	\$100,000 to \$250,000	Funding for construction in Action 18
9	Outline utility improvements needed to support new development.	Utilities, Public Works	Mid-Term	\$100,000 to \$250,000	Funding for construction in Action 18
10	Develop a parking strategy to accommodate a phased redevelopment of the area.	General Services	Mid-Term	\$100,000 to \$250,000	Funding for construction in Action 18

ACTION		LEAD RESPONSIBILITY	TIMEFRAME FOR COMPLETION	COST CATEGORY	COMMENTS
IMPLEMENTATION TOOLS					
11	Develop and adopt zoning tools to create a framework as a walkable urban setting, centered on transit.	Planning	Immediate	\$100,000 to \$250,000	
12	Create a pattern book to give guidance to new development to support the creation of walkable urban spaces and the integration of green infrastructure.	Planning	Short-Term	\$100,000 to \$250,000	
13	Identify and pursue funding options to support the development and maintenance of necessary infrastructure to support the plan.	Public Works with operational departments	Ongoing	Existing Resources	
14	Explore incentives necessary to realize the plan.	Development	Ongoing	Existing Resources	
15	Leverage city-investments as a catalyst for private sector investment.	Development	Ongoing	Existing Resources	
16	Develop a branding strategy that supports the creation of a new identity for the area.	Marketing	Immediate	Existing Resources	
17	Outline a phased buildout approach for the redevelopment of Military Circle Mall and the surrounding area the introduction of light rail.	Planning, Development	Mid-Term	Existing Resources	
18	Identify and implement the appropriate oversight mechanism to facilitate the redevelopment of Military Circle Mall and the surrounding area.	Planning, Development	Long-Term	Several million	

APPENDIX A

Light Rail Extension Implementation

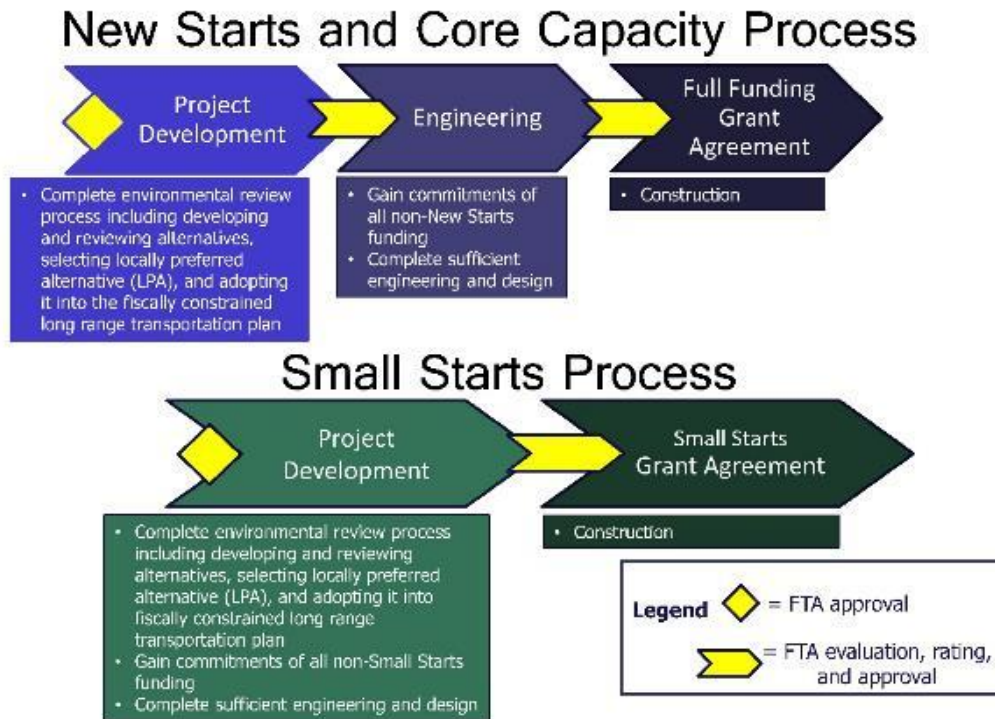
The Implementation Plan describes the actions and possible interrelations associated with the planning, design and implementation of the extension of the 7.4 mile Tide Light Rail Guideway System (LRT Extension) to Naval Station Norfolk, and the redevelopment of Military Circle Mall and the surrounding area (referred to as “Military Circle”) as a node along the LRT alignment. Both initiatives strongly influence one another, with redevelopment potential guiding the final determination of LRT alignment and project development process, while LRT conversely shapes the overall phasing and build-out at Military Circle.

The task of steering the LRT extension from the initial planning stages to a fully operational system, utilizing federal funding and processes, historically requires from six to twelve years. Cost for light rail projects varies and can typically runs from an average of \$35 million per mile to up to \$200 million per mile, depending site conditions and the amount of tunneling and elevated structures required. Due to the significant capital costs, many communities choose to pursue federal funding through the Federal Transit Administration’s (FTA) New Starts or Small Starts programs. The Capital Investment Program (New Starts, Small Starts, and Core Capacity Improvements) is the federal government’s primary financial resource for supporting locally planned, implemented, and operated transit guideway capital investments (see Table A1).

To be eligible, project sponsors must request entry into the New Starts program. Once approval is received, all projects seeking funding from the program must be evaluated and rated based on project justification and local financial commitment criteria. This project development and evaluation process is a multi-year, multi-phased process that has a significant impact on the overall implementation schedule for the project. Additionally, securing a minimum of 20 percent non-federal funding and navigating through various state and federal requirements, including community and private sector commitments, land easements and acquisitions, is imperative to advance the LRT project, reach key decisions, and maintain support from implementing agencies.

Other options for funding are state and regional funding or public-private sector partnership (P3) where the private entities own and/or operate the rail. These types of partnerships can compress project timeframes due to lack of federal financial requirements and commitments. However, the interest on the debt service increases the overall costs by 2 to 3 times when compared to a FTA funded project. Choosing a funding strategy at this point in the planning process is critical, as it will drastically change the course for project implementation. Project sponsors should closely assess and weigh the long term benefits of any funding strategy. Also, securing a long term source of available funds for the capital match and continued operation and maintenance of the transit system is also required.

Table A1: Federal Transit Administration Fixed Guideway Capital Investment Grant Overview



Approx. \$2.3 Billion annually available FY16-FY20 Projects with Public Private Partnerships will be streamlined.			
NEW STARTS		SMALL STARTS	
Total Project Cost, or	Over \$300M	Total Project Cost, or	Less than \$300M
Max. Federal \$ request:	Over \$100M	Max. Federal \$ request:	Less than \$100M
Max. CIG Funding	60%	Max. CIG Funding	80%
Max. Total Fed. Funding	80%	Max. Total Fed. Funding	80%

After the project has received approval to enter into the federal New Starts process or a public-private partnership has been forged, more detailed technical analyses are required to assess the actual costs and to document the mobility and economic benefits of the project. These studies should address the final alignment, technological specifications, operational needs, station locations and designs, land use, environmental and economic benefits, and provide detailed capital and operations costs. Most importantly, the project development process should demonstrate local community support and a strong financial commitment. The culmination of this phase results in a locally preferred alternative that is adopted by the region's transportation policy boards. The project sponsor can then request entry into the FTA's engineering phase of the New Starts process. At the conclusion of engineering, negotiations may commence with FTA on a full funding grant agreement for New Starts.

It is important to define the roles and responsibilities of each agency and stakeholder involved in ensuring the implementation of the project. A well-defined project management plan, identifying the overall project sponsor agency and the supporting agency roles and responsibilities, sets clear expectations during the life of the project and allows for a seamless transfer between project phases. In many cases, the City of Norfolk with Hampton Roads Transit (HRT) may conduct the

concept and feasibility, project development, and environmental studies. However, as the project advances into design and construction, HRT or the City, will likely assume the role of project sponsor.

Coordination of the LRT Extension

Throughout the planning, design, engineering and implementation of the LRT Extension, close coordination among public agencies, from local municipalities, transit agencies, the State and federal government, will be critical to the success of either initiative. The key roles and responsibilities for assuring compatible and complimentary timelines for a LRT extension and Military Circle redevelopment bringing the LRT Extension into fruition include the following:

- City of Norfolk (City) - is a joint partner with HRT in developing a Draft Environmental Impact Statement (DEIS) for the Naval Station Norfolk LRT extension. The City will be a key stakeholder in the decisions regarding planning, design and implementation of the LRT project. The City will be responsible for engaging and leading the redevelopment effort of Military Circle, and coordinating any potential LRT alignment with the future build-out. The City would also assist in assembling a portion of the non-federal match contribution required for federal funding.
- Hampton Roads Transit (HRT) - will initiate the DEIS for the LRT extension, and be the principal point of coordination regarding federal requirements adherence. HRT, in partnership with the City and HRTPO will assess the impacts of the alignment as part of the overall transit system, with insight into operational impacts, future ridership, and land-use compatibility for the LRT extension.
- Hampton Roads Transit Planning Organization (HRTPO) – provides overarching guidance and input into the project, ranging from travel pattern analysis, forecasting, and air quality conformity. HRTPO would be able to channel additional and eligible federal funding from other programs (i.e. Congestion Mitigation and Air Quality) to meet necessary commitments. Ultimately, HRTPO maintains the LRT project in the Long Range Transportation Plan (LRTP) and Transportation Improvement Plan (TIP).
- State of Virginia - Department of Transportation (VDOT) will be responsible for review of any LRT impacts to State right-of-ways and highway overpasses. They will also work with private developers in accordance with traffic impact analysis regulations. The Department of Rail and Transportation (DRPT) will be responsible for providing planning oversight, assisting in the review/determination of the LRT preferred alternative screening, and possible contribution of state funding as applied to planning, design and/or construction management of the project.
- Federal Transit Authority (FTA) – is responsible for the evaluation, ranking and funding of transit projects that are seeking federal funds, which also includes environmental analysis and review of alternatives per the National Environmental Protection Act (NEPA) and compliance to federal standards.

Critical Path

While the LRT extension and on-going redevelopment of Military Circle may proceed at different paces, both initiatives remain interlocked at key milestones during the LRT planning process as it relates to the possibility of the alignment (and type of guideway system) that could traverse through Military Circle. Therefore the Critical Path that can be envisaged guides the implementation of the LRT extension while impacting the phasing strategy. The development pattern of Military Circle may require the City to take actions on key policy decisions that affect its outcome.

The Critical Path for City involvement has been organized into three phases with the following milestones that roughly correspond with the New Starts steps presented in Table A1:

- **Phase 1. Legitimize the Project.** Supports the Military Circle alignment determination in the DEIS development, with supporting policy to solidify the Locally Preferred Alternative (LPA) determination.
- **Phase 2. Facilitate Design.** Consists of the supporting analysis and local technical details to advance the design, engineering and approval of the LRT extension. Full funding commitments for the non-federal share of project costs need to be in place at the conclusion of this phase.
- **Phase 3. Implementation.** Involves the construction of the LRT extension and the on-going operations of the system. In this phase, easements, land acquisitions and right-of-way improvements may also be involved. This phase extends beyond LRT opening day as the Military Circle redevelopment plan progresses to full build-out.

The DEIS will evaluate the environmental, transportation, social, and economic impacts associated with the LRT extension, and describe alternatives, including a No-Build Alternative, a National Environmental Protection Act (NEPA) Preferred Alternative, and several Project Element Alternatives within a public outreach process. LRT systems are focused on a regional scale and a preferred alignment will be evaluated within this context. Establishing the LRT project Purpose and Need is the first step in the planning process, tying commuter travel patterns and anticipated growth to illustrate a need for connecting high ridership and housing areas to employment centers and major destinations which may or may not validate alignments alternatives, including the alignment through Military Circle.

During the development of the DEIS, a market study could be undertaken to evaluate potential land use and development feasibility along the Military Highway corridor (with and without the LRT extension through Military Circle) to inform what policies and incentives a Specific Plan and/or Overlay District could articulate within a framework for new development, parks and open space over the next 10 to 20 years.

There are two milestones that directly affect the redevelopment of the study area:

- Adoption of a LPA
- 30-percent Design and Preliminary Engineering.

Milestone: Adoption of a LPA

The LPA defines the alignment and termini, transit mode, general station locations, and design objectives for the transit project. While the LPA outlines the general corridor configuration, it does not determine a specific design. The design will be determined during the Design and Engineering Phase of the Critical Path.

More importantly, the LPA legitimizes an alignment that could traverse through Military Circle. A Specific Plan for Military Circle can now be initiated since there is a sense of certainty with an adopted alignment, that a plan can propose specific development block parcels with new roadways that can accommodate a LRT alignment. The Specific Plan should also look at a number of options, including a lengthier period of time due to funding not being all in-place, in which the extension takes longer than expected, and an option where there is no alignment through Military Circle.

A Specific Plan could describe the orderly revitalization and vision of Military Circle with a strategy of how development could be phased over the next 10 and 20 years. The Specific Plan could identify what right-of-way improvements are needed to support a phasing strategy that gradually repurposes portions of the existing mall in a way that preserves area for the future LRT alignment, while accommodating new structures when market demand is available. In addition, a Specific Plan can designate parks and open space and employ “complete streets” elements that balance new roadways with equal priority between vehicles, pedestrians and bicyclists. The Specific Plan could also propose zoning ordinance amendments as a way to incentivize development and certain land uses.

While a Specific Plan can articulate critical right-of-way improvements to support future development, a Funding Plan can identify strategies to finance those improvements over the course of the build-out. A number of strategies could be articulated in a Funding Plan. For example, the Funding Plan could propose a project boundary over the parcels that comprise the redevelopment of Military Circle as a Special Service District that utilizes Tax Increment Financing (TIF). TIF is the ability to capture and use most of the increased local property tax revenues from new development (within the boundary) for a defined period of time to implement public right-of-way infrastructure improvements to support the on-going build-out of Military Circle. Legal findings and approvals from various public agencies, including the State of Virginia, would be required to establish Military Circle as a TIF District, which could take an extended period of time due to the political ramifications. A TIF District could be an attractive incentive to attract development by offering a long term financing mechanism for infrastructure improvements that increases as more development is realized, gradually fulfilling the vision of Military Circle.

The full build-out of Military Circle will be complicated and will take time and long term commitments. The City has several options to ensure that the complex assemblage of parcels and orderly phasing of new development promotes the highest and best use of land, starting with the redevelopment of the mall, with the gradual phasing of new development, while anticipating the arrival of a LRT alignment within its configuration.

There are several strategies that the City could pursue. The City could assist in a public-private venture with the formation of a development corporation composed of key property owners, businesses, stakeholders, technical and financial advisors, and representatives from the City. The City owns a key parcel of land within the mall, and has a direct financial stake and leverage in the redevelopment of the entire site. More importantly, the City’s financial stake provides a sense of certainty and minimizes the perception of risk. This development corporation would serve as the driving force between the City and property owners for assemblage of land, the orderly redevelopment of the mall and gradual new development for the entire site, while gaining commitments of prospective businesses and investors. This entity could also identify support infrastructure needs to help generate the private investments.

Another option is to have a third-party entity take the lead in managing the development of Military Circle. In this scenario, the City could issue a Request for Qualifications and Proposals (RFQ/P) for Master Developer(s) with the City as partner. Various selection criteria could be identified in the selection criteria, the most critical of having experience in multiple block developments, starting with the repurposing of failing mall structures, with the ability to hold and land bank property over a long period of time until the market demand is available to turn a lot into a development. Experience in construction typologies associated with high density mixed use development, especially with addressing parking, both financially and by design, transitioning from surface parking and determining how to make encapsulated or structured parking financially feasible, could be written into the experience criteria. The selection could include one or multiple

developers with financial partners for the assemblage of parcels and long term build-out. The Specific Plan could be provided as an attachment to the RFP to serve as guidance for creating a Master Development and Phasing Plan. The RFP could ask for a Development Plan that could include block configurations with/without the LRT alignment, multiple land use scenarios, coupling office, hotel, commercial and residential in various configurations based on market feasibility of current and future demand.

The trigger for initiating such a RFQ/P is not entirely dependent on the adoption of a LPA, since the RFQ/P could take a phased approach, by focusing on the redevelopment of the mall at first and then expanding to the whole site once a LPA and Specific Plan are adopted.

Milestone: 30-Percent Design and Preliminary Engineering

When the LPA is affirmed through a formal Record of Decision and progresses to a Final Environmental Impact Study (FEIS), including re-adoption of LRTP and programming of the TIP, prioritization of the transportation funding priorities for the region can proceed and allow the project to move forward to a more detailed corridor analysis. At this point, transportation strategies and alternatives are analyzed within the local land use framework and compared to determine the most appropriate solution for connecting regions, neighborhoods, or destinations. Stakeholders are engaged to make critical decisions such as alignments, transit technologies, right-of-way needs, connecting modes and routes, capital and operational needs, order of magnitude costs, implementation schedule, and how each scenario will be funded. Station locations and surrounding transit oriented land use plans should also be considered at this point to enhance the viability of the system. At its conclusion, a detailed corridor and feasibility study should provide enough information to advance to the next phase of project development and assist in determining whether to pursue public or private sector funding or a combination of both in building and maintaining the project. The 30-percent Design and Preliminary Engineering is a critical milestone because it further solidifies the physical reality of the alignment, including station locations and type of guideway alignment, and more importantly, the nature of its funding and whether it will traverse through Military Circle. At this milestone, a detailed analysis of traffic impacts based on the alignment, as well as analysis of current and future utilities, infrastructure and storm water can be undertaken to identify specific right-of-way improvements.

Military Circle Redevelopment Phasing

Development in Military Circle, from the type of construction and amount of density, may increase once LRT extension is a real project. Currently, the most effective approach is what the City is currently undertaking with the repurposing of the existing portions of the mall. As demand for housing increases in the City and region, marketing efforts could be directed to promote Military Circle as a smart place to invest given its resiliency in the face of sea-level rise (area is higher ground), making it the obvious place to build for the future.

The first phases of redevelopment should prioritize blocks adjacent to the future (adopted and funded) alignment while focusing on organizing Military Circle into smaller and more intimate development street blocks by initiating a new roadway grid system that ties back to Virginia Beach Boulevard and Military Highway. The City will need to decide whether it wants to control new roadways within Military Circle by right-of-way easements for public travel and whether it wants to own the property underlying the right-of-way.

As Military Circle redevelops, a particular outcome will be the gradual conversion of asphalt parking lots to mixed use development, resulting in a loss of surface parking. Developing structured parking, either encapsulated within the development or below grade is not financially

feasible from the standpoint that there is no market or demand for the resultant price point for such construction typology. New mixed use development that is defined by several stories of residential over commercial will most likely have parking located at-grade, tucked into or enclosed within the development footprint. However, this development pattern is not sustainable over the long term, from both a smart use of land perspective and the desire to have compact mixed use development.

The City will need to have a strategy in-place that gradually guides development from surface parking, to enclosed surface parking, to encapsulated parking wrapped by active use development at the sides and above. The market will primarily drive this trajectory, based on demand, which must be great enough to force a shift in construction typology, and facilitated by whether Military Circle is a desirable location where people want to work and live.

The City has several strategies that it could pursue that have been applied in other municipalities, including City construction of above grade parking structures in partnership with developers, splitting costs to provide public parking and parking intended for private use. The City could utilize TIF to pay for their portion of the garage.

Development Partnership Opportunities

As part of the build out of Military Circle, the City could initiate a RFQ/P for a development partner to finance and build a shared-use parking structure as part of a larger development. Once a development team is selected, the City would enter into an agreement with the developer or and third party operators, to share the costs of constructing an above grade parking structure that could serve as the base of a high-rise structure that supports commercial at the ground level and residential uses above, in order to achieve greater density and demand for housing in this area.

A shared parking agreement could stipulate the type of development, number of units and commercial area to reach financial feasibility for all parties. Timing of when this type of scenario could be initiated will be critical in that there would have to be a foreseeable demand for this type of housing product in this area in order for the RFP to succeed in bringing in a developer(s) with the financial capacity, experience and qualifications to be successful in this type of endeavor.

In another option, the City could engage HRT to develop a park and ride parking structure, adjacent to the alignment, by a joint use agreement between HRT, the City and private developers that stipulates parking for transit, residential and commercial uses. The agreement could even involve multiple development sites for off-setting the costs for a structured parking garage. In addition, residential parking in some of the private developments could be rented during the day to increase the pool of parking that could additionally offset the costs of the private development. There could be an opportunity to have the LRT station be designed as part of private development that is attached to public parking structure.

The following chart describes the overall implementation process proposed with a critical path showing the interaction of the Military Circle area redevelopment with the potential light rail extension.

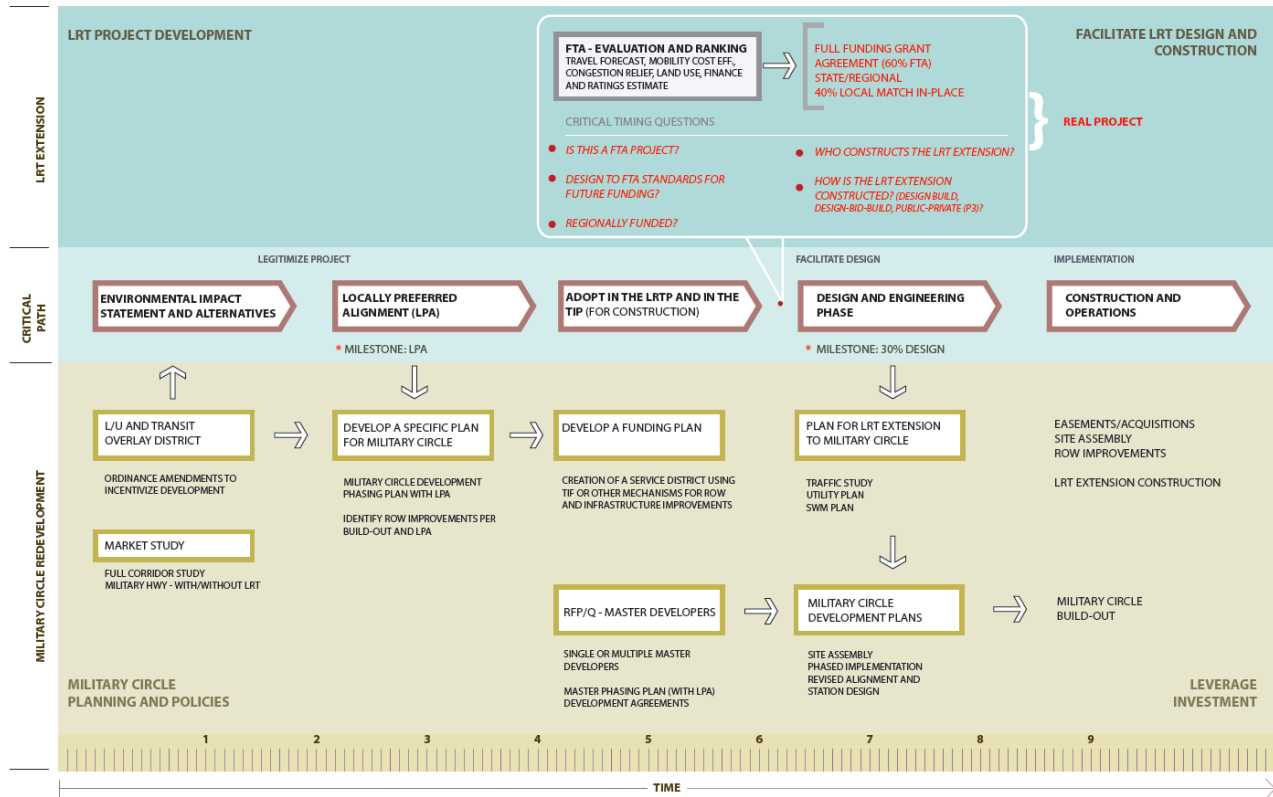


Figure A1. Implementation diagram

APPENDIX B

Potential Phasing Approach for the Redevelopment of Military Circle Mall

The Vision Plan explored the potential for a phased and gradual implementation in the Military Circle Mall area. This plan, starting with the present condition, explores five potential stages of redevelopment of this specific site. The area is currently comprised of the mall with three former anchor stores that are now closed and a movie theater. The City has purchased the former JC Penney anchor store and is in the process of converting it into office space which will bring hundreds of new jobs to the area.

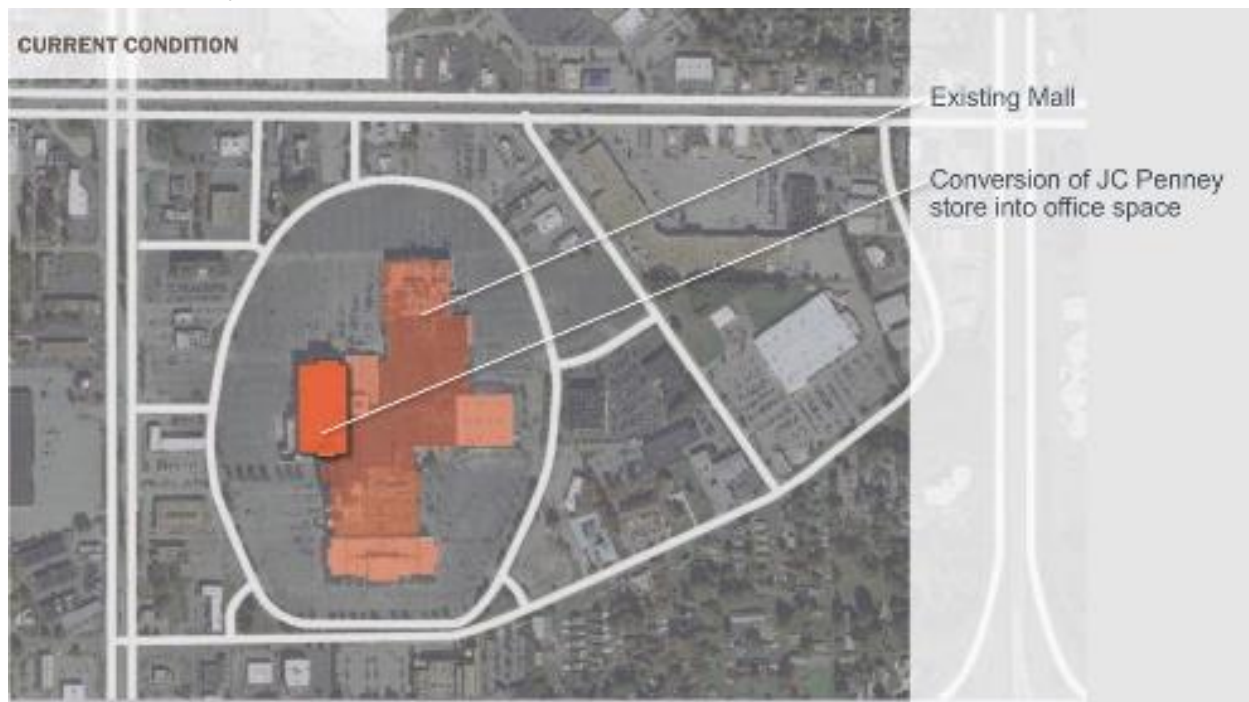


Figure B1. Military Circle current condition

Military Circle Stage One

Stage One of the plan builds on the recent work that the City has undertaken in repurposing the JC Penney's store and calls for working with potential developers and prospective tenants on the future conversion of the other two anchor stores – Sears and Macy's. It also shows the first steps of developing a road system and open space for the future urban center.

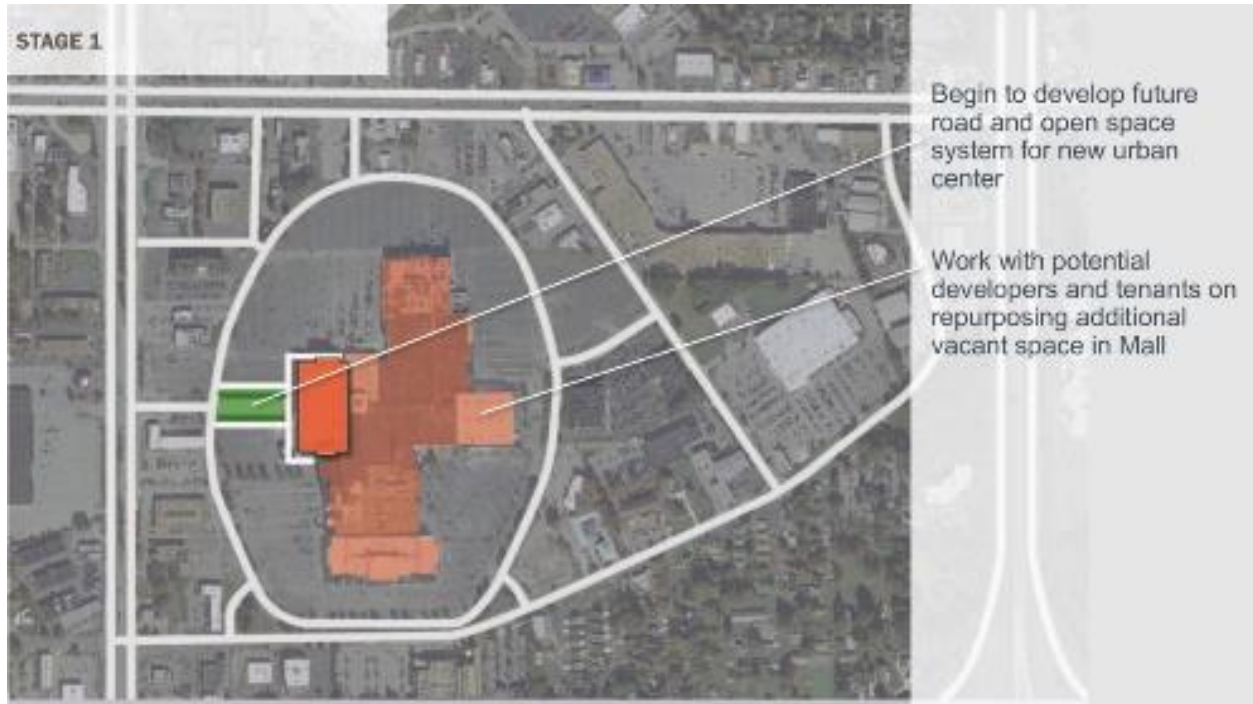


Figure B2. Military Circle Stage 1

Military Circle Stage Two

In Stage Two, additional anchor stores are repurposed for flexible office space or institutional use. New entrances are oriented to the outside to prepare the mall to allow greater visibility and flexibility for redevelopment of the interior of the mall. In all stages, the future Vision Plan is kept in consideration and the road system and open space system are developed as space leases up according to the ultimate plan for new streets, blocks and open spaces

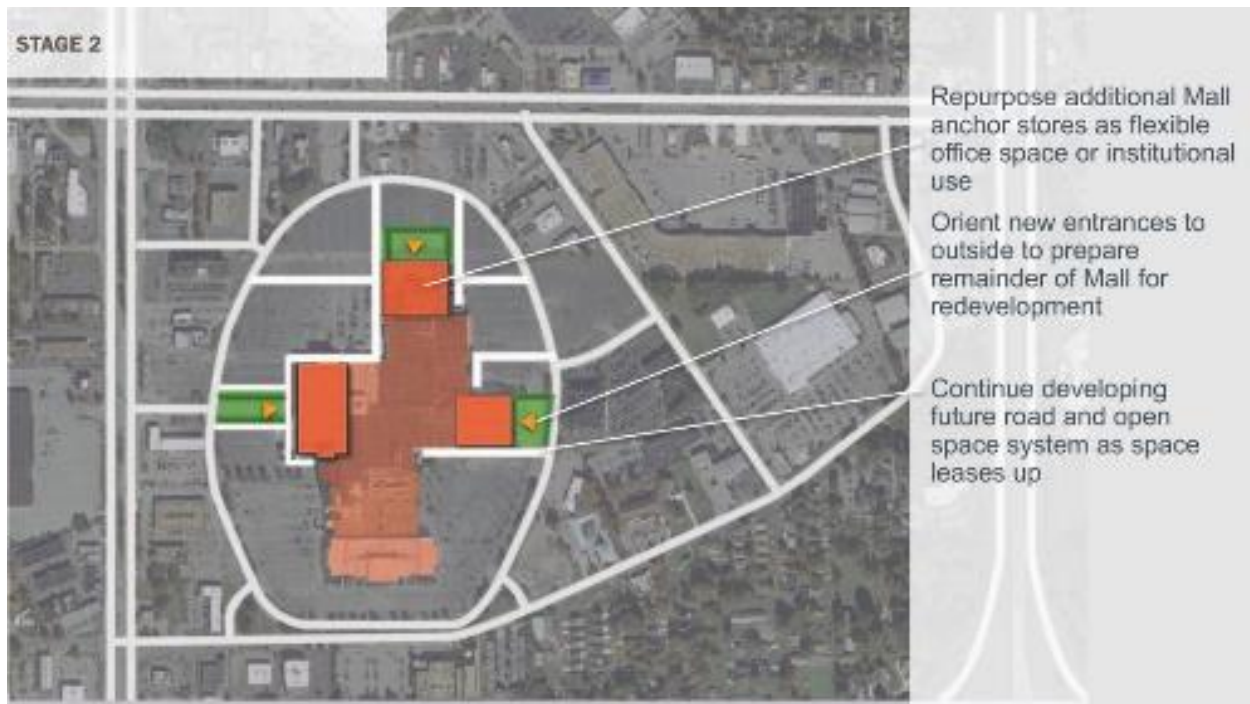


Figure B3. Military Circle Stage 2

Military Circle Stage Three

Stage Three shows the additional anchor stores repurposed and allows the demolition and repurposing of the interior of the mall and its conversion to temporary open space or surface parking areas. This allows a campus of new office uses to be organized around the gradually emerging future street grid. Additionally, new, high density office space can start to be developed at this stage for potential transfer of existing tenants from the repurposed mall anchor stores, thus avoiding the displacement of existing businesses from the area.

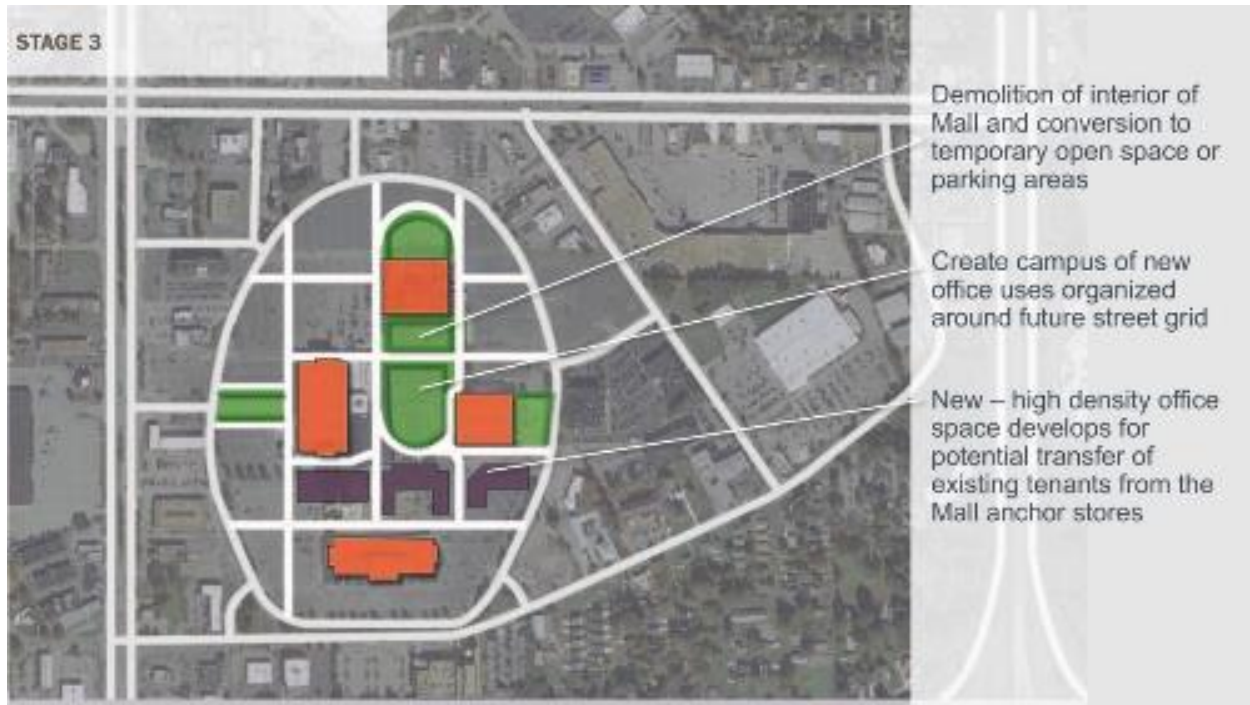


Figure B4. Military Circle Stage 3

Military Circle Stage Four

Stage Four shows the gradual demolition of former mall anchor stores as land values in the area rise, and new development of high density mixed office and residential buildings within the already established future roadway and urban block system. It also shows the preservation of right-of-ways for future light rail.



Figure B5. Military Circle Stage 4

Military Circle Stage Five

Finally, in Stage Five, light rail is built in the right-of-way that has been maintained and begins to catalyze high density, mixed use development and walkable streets in a vibrant new urban neighborhood according to the vision.

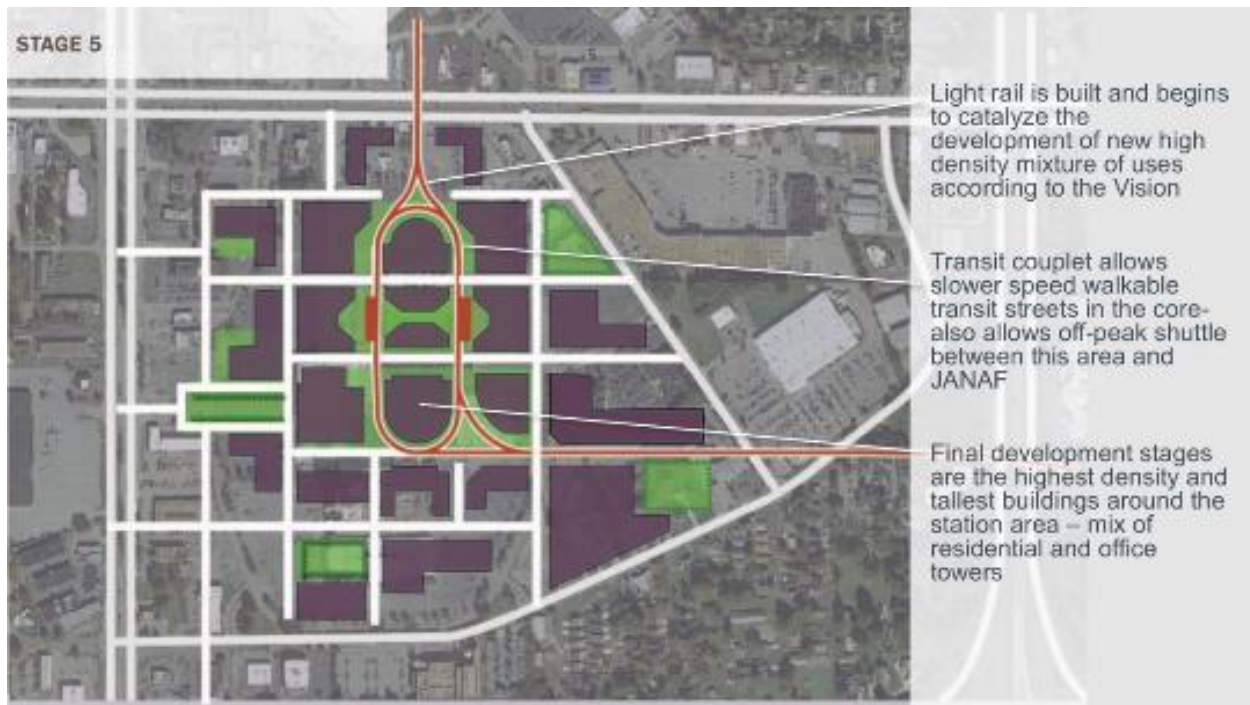


Figure B6: Military Circle stage 5